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TO Richard Helm
FROM Frank R. Barnett
SUBJ. Program - "Red China's Military Capability" etc.

Enclosures: (2) The First Inter-professional Forum on Priorities for Peace
List of Study Materials

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THE FIRST INTERPROFESSIONAL FORUM ON PRIORITIES FOR PEACE

PROCEEDINGS

NEW YORK CITY
DECEMBER 6, 1966

Approved For Release 2004/10/13 : CIA-RDP88-01315R000300710006-8

PROCEEDINGS

OF

THE FIRST INTERPROFESSIONAL FORUM ON PRIORITIES FOR PEACE

HELD IN

NEW YORK CITY

DECEMBER 6, 1966

NATIONAL STRATEGY INFORMATION CENTER, INC.
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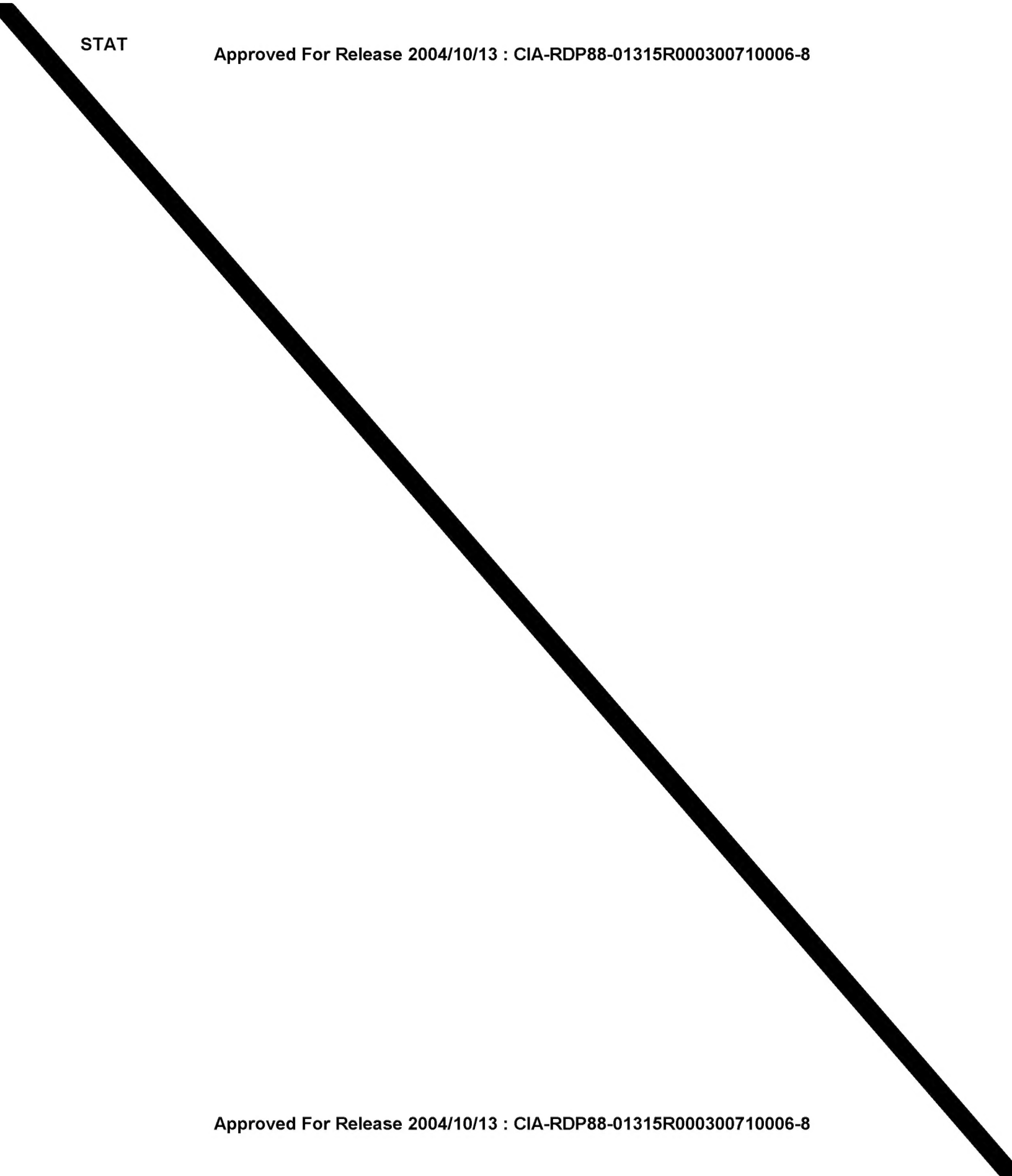

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INTRODUCTION

THE FIRST INTERPROFESSIONAL FORUM ON PRIORITIES FOR PEACE

December 6, 1966, was the 25th anniversary of Pearl Harbor Eve—that moment when America slept, indifferent to the strategies of foreign dictators, taking false comfort from the assumed security of her great ocean moats, unaware that the carriers of Imperial Japan were readying a first strike, and ignorant also of the ideology and global war plans of Nazi Germany.

In the nuclear age, it is imperative that Americans never again misread the intentions, or underestimate the capabilities, of totalitarian Party elites. It is vital that civilian opinion-leaders understand the complex formulae of national defense and security affairs which include factors of technology, diplomacy, economics, and national will.

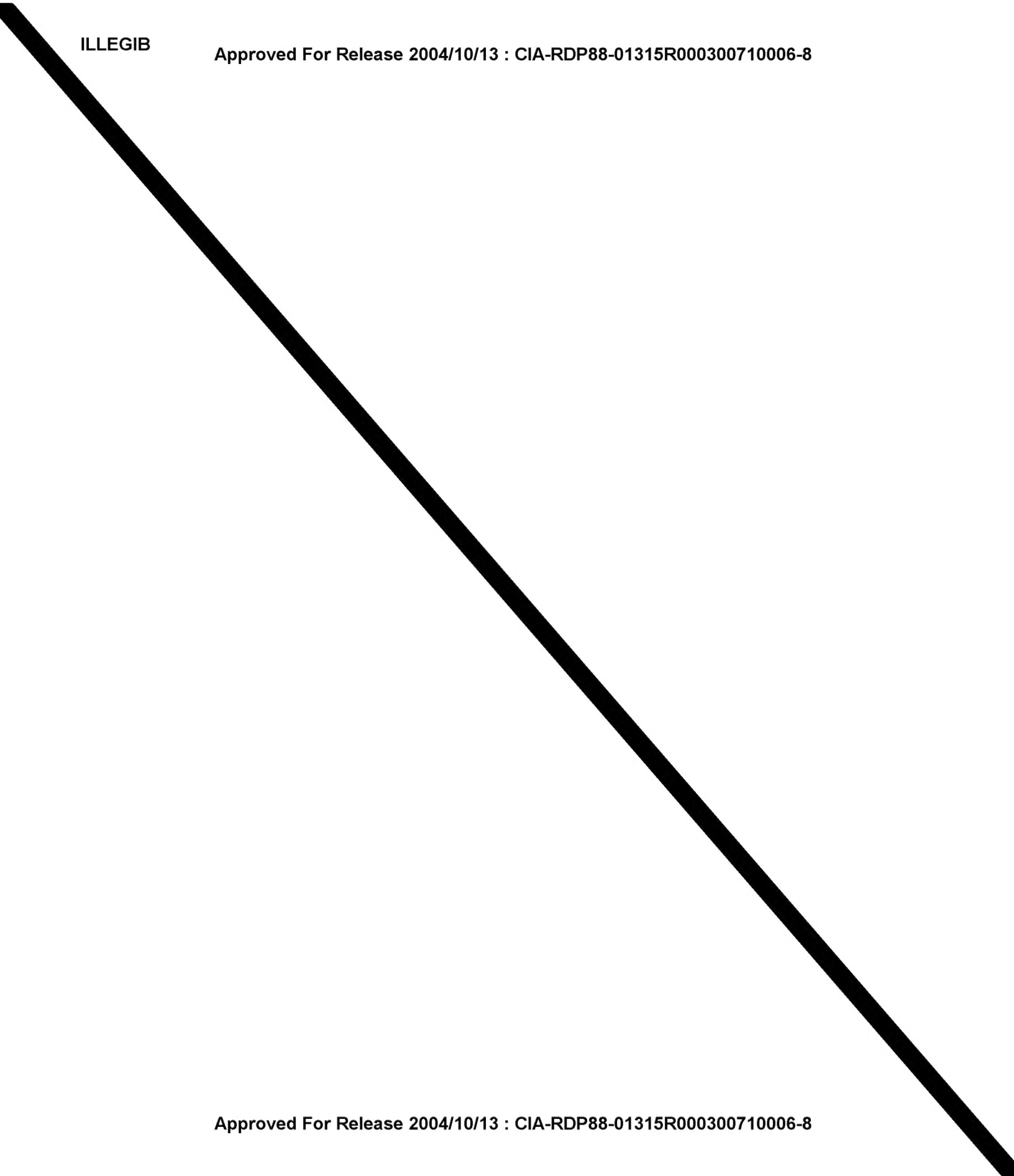
In order to consider some of these issues systematically and in depth, the National Strategy Information Center, Inc., sponsored The First Interprofessional Forum on Priorities for Peace at The Plaza Hotel, New York City, on December 6, 1966. The purpose of this Forum was not to look backward towards December of 1941, but to focus on the requirements of a sophisticated "forward strategy for freedom" that will enable the United States, in the next 10-15 years, to (a) keep aggression at bay, whether through insurgency or space warfare, and (b) help less fortunate nations build the institutions required for genuine peace and human betterment. We sought educational substitutes for Pearl Harbor and searched for new organizational skills by which the private citizen can more effectively answer the question: "What can I do for my country?"

The conference was attended by more than 400 participants who comprised a cross section of distinguished leadership from business, the professions, and the military services.

The Co-Chairmen of the Forum were Ambassador Theodore C. Achilles, Vice Chairman of the Executive Committee, The Atlantic Council of the United States, Inc.; Joseph D. Ardleigh, President, The Research Institute of America, Inc.; and Major General Alfred G. Tuckerman, USAR (Ret.), Administrative Partner, William E. Hill & Company, Inc.

Honorary Co-Chairmen included Samuel Belkin, President, Yeshiva University; Albert H. Bowker, Chancellor, The City University of New York; Bernard E. Donovan, Superintendent of Schools, The City of New York; Harry D. Gideonse, Chancellor, New School for Social Research; Richard H. Heindel, President, Pratt Institute; R. Gordon Hoxie, Chancellor, Long Island University; and Rev. Leo McLaughlin, S. J., President, Fordham University.

The following professional and educational institutions joined with the Na-



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ARE LENIN, TOJO, AND GOEBBELS DEAD?

Preface to a Pearl Harbor Anniversary

BY FRANK R. BARNETT

Summary of Remarks

Mr. Frank R. Barnett is President of the National Strategy Information Center, Inc.

Since history never repeats itself exactly, one should not belabor the fact that this December 6th is the 25th Anniversary of Pearl Harbor Eve. On the other hand, while all analogies are misleading, some may still be instructive. Perhaps two lessons can be derived from the remembrance of Pearl Harbor. The first relates to the sin of pride. Americans did not win World War II in the Pacific in six weeks, or even six months. Our "Asiatic" opponent was more tenacious, more skillful, more courageous, more inventive than he had been pictured in the comforting mythology of the Anglo-American peoples.

Have we yet overcome our sins of pride? In Korea, against another "Asiatic" opponent, we were going to "bring the boys home by Christmas." In Vietnam, it is taking half a million men to finish what some politicos thought was a job for only a few thousand. And it was only yesterday we were told that American industry had nothing to fear from the competition of the "oxcart economy" of the Soviet Union. On at least four subsequent occasions we have underestimated the capability of that oxcart economy: first, when Stalin's scientists acquired the hydrogen bomb five years sooner than most of our experts predicted; second, when *Sputnik* astonished the West with the payload Soviet rockets could hurl into space; third, in 1961, when Khrushchev's test of a multi-megaton hydrogen bomb may have given Russia insights into ways to black out military communications and/or to fuse the guidance systems of American rockets into impotent lumps; and fourth, today, when the commissars have displayed the "economic will" to deploy a fantastically expensive ABM system.

As a footnote to our sin of pride, we might recall that, as little as three years ago, many American experts were untroubled by Red China's nuclear ambitions. It seemed clear to them that nothing substantial in the way of nuclear weapons was to be expected from that "primitive" quarter before 1972 or even 1975. Today, the Pentagon concedes that Peking may have some nuclear-tipped rockets in place by late 1967, a prospect which should also give pause to Europe, some of whose cities are less than half as far removed from Chinese launching sites as San Francisco.

The second lesson suggested by Pearl Harbor was that, while the immediate strike came from the Far East, an even greater threat had already reached almost overwhelming proportions in Europe. The unambiguous provocation from Japan triggered our belated response to the much more serious danger from Nazi Germany. How different the fate of the world if America's "peaceful coexistence" with Hitler

had been prolonged for another four years! German science and industry, immune from the ultimately massive weight of American airpower and the shock of Allied invasion, might well have succeeded in asserting domination over Britain and all the Eurasian land mass.

Is there a moral for today in the strategic lessons of World War II? I believe there is. A geopolitical axiom for our own time might be expressed in this way: "Police the perimeter of the Far Pacific; but remember that whoever masters the military-industrial-scientific resources of Europe menaces four continents." And a corollary to that precept is: "When you recognize that an adversary's *capabilities* are formidable, do not discount his *intentions* in order to suit the current fashion of ill-informed opinion or the misguided expedience of politicians."

Everyone can agree that the world is changing and, with it, even the Soviet Union. The operational questions are: How much change? In what precise direction? By what fraction of the total party bureaucracy? In what time span? In relation to what threats or incentives? In what context might positive tendencies reverse themselves? For example, no iron law of progress guarantees an upward curve in the peaceful intentions of the Soviet leadership, as one generation of rulers succeeds another. Since the violent internal politics of a Communist dictatorship could readily return another Stalin to power, it would be prudent for the West to preserve its defenses intact, pending an evolution of the Soviet system that would give Russian public opinion and a loyal political opposition some meaningful leverage against Communist careerists.

It is conceivable that a future generation of largely non-ideological Soviet managers may conclude that such Russian war games as Nuclear Roulette (*à la* Cuba) and Fifth Column (*à la* Syria) are too dangerous for the last quarter of the twentieth century. But those managers are not likely to share policymaking authority with the entrenched ideologues for another fifteen years, if then. Even a casual reading of Communist Party journals, or the most cursory examination of recent Soviet initiatives in the field of foreign affairs, reveals the imperialist objectives of the men in power in Moscow today, tommorrow, and probably until 1975. They are latter day Cromwells whose zeal and invulnerable self-righteousness are still fed by the writ of Lenin.

It is alleged by some that Khrushchev's heirs no longer wish to bury capitalism, but would much prefer to inter the Cold War. If this were so, why there's an easy end. But *is* it so?

Those who postulate the death of Marxist ideology often cite as evidence such stuff as the whispered confidence of a Soviet scientist as a Pugwash Conference; or an epic of political protest penned by some favorite Russian poet; or the enthusiasm of Soviet factory managers for automation and techniques of cost control (as if Hitler's industrialists had not also been deeply concerned with production efficiency). But what is the *relevant* evidence about the aspirations, not of Russian writers, some of whom are now in prison for criticizing socialism, but of the Soviet power elite? Do they disclose the mainsprings of their behavior to random Canadian

journalists, or rather to U-2 cameras which sometimes see the evidence of Moscow's deeper purposes?

What, for example, is the percentage of increase in the Soviet defense budgets for the new Five Year Plan? Are the hidden components of those budgets chiefly allocated to conventional armament, to defensive space warfare, to more exotic offensive weaponry, or to all of these? Are the men in charge of the Soviet space effort *civilians?* Are they oriented professionally towards the peaceful uses of outer space, or to the military potential of inner space? Have the rocket marshals been demoted? Are Soviet anti-ballistic missile systems intended only as insurance against Red China? Has Moscow deactivated its guerrilla warfare training schools? Has it reduced subsidies for anti-American propaganda in Latin America? Or stopped arms shipments to the Middle East? Or cut back industrial espionage inside the United States? Or curtailed the construction of submarines and a military trawler fleet?

Whether uttered in Paris or Moscow or Vienna, the words of those who actually rule the USSR give scant support for the assumption that Soviet leaders have changed their long term goals. Brezhnev, Kosygin, Podgorny, Suslov—indeed, all high Party officials—hammer incessently at three themes: first, that German militarism and "revanchism" must be squashed—and that, therefore, it is just up to Washington to prove its peaceful intentions by severing military ties with Bonn; second, that the Vietnam War can only be settled by the withdrawal of American troops, and the formation of a Saigon coalition government in Saigon that will ensure an eventual Communist takeover; and third, that Russia is a *European* power, and would join a "neutralist" Europe in the pursuit of peace once NATO is dissolved and an "alien" America has been encouraged to retire to its own continent.

Thus, if one applies a "management audit," rather than intuition, to the assessment of Soviet goals, it is clear that Moscow adheres to the simple Stalinist objective of expelling American power from both Europe and Asia (albeit with a mix of diplomacy, threats, and propaganda instead of naked force). Indeed, the commissars scarcely need change or conceal their tactics, so anxious are certain Western statesmen to divine portents of "relaxation and reform" in the contrails of the Eastern heavens.

Do the Soviets send ground-to-air rockets to Hanoi, and Russian technicians to give instructions on how to launch them against American planes? No matter. We should infer, from the firm handclasp of the Commissar for Trade, that Russian weapons are sent to Hanoi *reluctantly*.

Did Soviet leaders subsidize the 1966 Tri-Continental Conference in Havana and further its export trade in guerrilla warfare? Do they today intensify their subversion of the Middle East? No matter, they have not threatened Berlin at all this season (although those who try to flee from "mellowing" totalitarianism are still shot down at the Wall).

Does massive Soviet propaganda exploit the unpopularity of the Vietnam war

to isolate America from our friends in France and Britain? Does Brezhnev resist all British suggestions that Moscow use its good offices to bring Hanoi to the negotiating table? Do the commissars ship arms to Syria, Algeria, and the UAR for revolutionary re-export? No matter. Though they persist in their propaganda . . . though they seek to re-establish a Popular Front in France and Italy . . . though they vilify our West German ally and accelerate their expenditure on missiles . . . we may yet civilize the Soviets by sharing with them the fruits of Western technology which (by manipulating semantics) can even be re-classified as "non-strategic."

In such a world of apolitical largesse from the United States, what incentive could any Soviet leader have for altering his hostile stance on the future of a unified Germany, or the fate of Vietnam, or the stability of the Middle East (threatened by terrorists paid as Nasser's proxies from Moscow's exchequer)? In today's climate of illusion, stubborn facts are rejected by the even more stubborn dogma of detente. For, despite Moscow's determined effort to overtake and leapfrog American military technology and notwithstanding the undiminished scale of worldwide Communist agitation, some Americans seem willing to assist General de Gaulle in dismantling those proud towers of NATO which, for 17 years, have barred the Tartar horde from Europe.

The debate over Russian intentions and the continued utility of a reconstructed NATO is, perhaps, the gravest problem we face in foreign policy; but it is by no means the only one. The statistics on world poverty and the population explosion stab the imagination and cry out both to conscience and common sense. Unless the industrialized nations of the northern hemisphere (the United States, Canada, Western Europe, and Japan) can transfer more efficient packages of capital, management know-how, food technology, public administration, vocational training, agricultural science, and sheer *motivation* to Afro-Asia and Latin America, three quarters of the earth may be a rural slum in the year 2,000; and from that slum will bubble perpetual revolution guided by Maoists, Leninists, Castroites, or the would-be Sukarnos and Nkrumahs of the 21st century.

The problem is so vast that it challenges the private sector as well as government. In the long run, only private capital has enough dynamism to create the jobs, technical expertise and tax base desperately required by the underdeveloped continents if they are to endure the ordeal of modernization. Universities and labor unions, foundations and international corporations, professional societies and the missionary branches of organized religion—all have a larger role to play if billions of human beings are not to drown in the quicksand of ignorance, terror, and disease. What irony it is that a tragedy of such cosmic magnitude might occur in the century which may yet witness, before its close, the healing of ancient religious schisms and the liberation of man from earth.

To be wary of the unrepentent Bolshevik myrmidon, while extending a friendly hand to the non-Communist Russian majority; to stand guard against the Maoist guerrilla, while aiding the peasant whom the Communist revolutionary seeks to subvert; to make truth prevail amidst massive misinformation; to carry the sword

in one hand and the agricultural instrument in the other; to discriminate between the totalitarian zealot and the dissenter who yet believes in pluralism; to contain hatred without surrendering to hate; to overwhelm libel in the court of world opinion with social justice and fair play (but also with more vigorous communications techniques); to demonstrate and advertise that the American military-industrial complex already employs its systems analysis, management efficiency, and multi-disciplinary operations to improve social and economic conditions as well as to strengthen defense; to prove that modern *realpolitik* is not bereft of humanitarian concern, and that latter day American capitalism is generating a progressive social ethic; to show that realists are not without compassion and that idealists can be pragmatic—here are the endless challenges and paradoxes than can excite and ennoble us all.

Let me conclude with a paradox that is the premise of this conference. It is that *the serious study of war and an intelligent strategy for peace are complementary, not antithetical.* Both national defense and wars on poverty, whether at home or abroad, require unsentimental analysis, skillful resource allocation, and a trained, professional cadre with good hearts and souls tranquil in the conviction that our cause is just. The baffling formulation we must learn to cope with over the next fifty years is "neither war nor peace;" and to solve it we must study both war and peace.

Since 1945, there have been no fewer than forty wars, large and small, on this earth. In that same period, the American people have spent $842 billion on defense and an additional $120 billion on foreign aid. The current defense budget calls for $73 billion more; which means that, by June 1968, our nation will have allocated more than *one trillion dollars* to containment of Communist aggression and to support of the social and economic reconstruction of less fortunate nations. To those who ask, Why hold an non-governmental Interprofessional Forum on international security? one can only reply that it is scarcely plausible for a great Republic to pride itself on civilian control of the direction of the ship of state unless commercial, voluntary, and non-profit private organizations address themselves *professionally* to the one trillion dollar question.

MILITARY AND TECHNOLOGICAL SURPRISE: THE LESSONS OF PEARL HARBOR

BY ADMIRAL ARLEIGH A. BURKE, USN (RET.)

Summary of Remarks

Admiral Arleigh A. Burke, USN (Ret.), is now Director of The Center for Strategic Studies, Georgetown University.

There are essentially three levels of military surprise: strategic, tactical, and technological. At Pearl Harbor the Japanese achieved tactical surprise. They won an engagement, but not the war. Pearl Harbor taught again an old lesson of history, namely, that surprise alone on any single level, or even on a combination of levels, is not enough for victory unless an irreparable proportion of the enemy's power—or of his will to fight—is destroyed by the surprise itself.

Of all the factors involved in a surprise event, the reaction of the recipient is clearly the most important, and yet probably the most difficult to understand. Surprise strikes the individual at many layers of his being simultaneously. It stirs his emotions; it stimulates his mind; and at its most effective, surprise will smother the ability to act. Mankind has struggled over the generations to understand these elements that stir within us in moments of great surprise. Yet, even since Pearl Harbor, there is little evidence of progress toward really comprehending how these forces work or how they can be controlled. Perhaps the study of cybernetics is a step toward understanding and controlling the reactions of masses of people. But, if so, it will be full of unknowns; and in the end, it may actually increase the effectiveness of surprise as a weapon instead of leading to its control.

If our quest for an understanding of the human elements of surprise has not made much progress since Pearl Harbor, our quest for technological innovation certainly has. Indeed, technology has in some ways advanced to the point where it can be confused with human understanding itself. To cite a single example, our technical ability to collect and transmit information has gone through an amazing revolution since 1941, and rapid progress in this area will probably continue far into the future. The computer, the communications satellites, high speed transmission—these are but a few examples of this revolution. Their combined ability to transmit and manipulate information is an achievement few of us dreamed of in the days before Pearl Harbor.

But again let us learn a lesson from Pearl Harbor. It is that the mere possession of vast quantities of information is not enough. In the weeks before the attack on December 7, 1941, an enormous amount of intelligence was at our disposal. One of the great tragedies of that occasion was that we literally had more information than we knew what to do with. We failed to evaluate the data we had. We should not confuse our ability to collect information with our capacity for using it.

And further, as we look into the 1970's, let us not misread the relationship between our ability to gather information and our vulnerability to surprise. Information will not save us from surprise unless it is properly used. On the contrary, the very volume of information available to us may make the possibilities of surprise even greater.

For example, our greatly improved information capability has made the possible employment of our military hardware much more flexible than ever before. Much of this flexibility comes from vastly improved information technology. There is no reason why, through the development of a similar technology, our potential enemies cannot gain an equal capability. Moreover, underdeveloped societies can also imitate the technical achievements of our own society. We do research, we develop and devise, and they copy. This may be very beneficial for mankind. But it also means that because we live in an open, individualistic, pluralistic society, we are at a disadvantage. Totalitarian societies have relatively free access to the fruits of our labors. But they do not accord us the same freedom. In consequence, our technological achievements, plus those in the totalitarian world, multiplied by the number of people making their first leap into the age of technology, increase the possibilities of surprise many times over.

We must not mislead ourselves about the ability of any other nation in any other part of the world to imitate and use the military tools that we have worked so hard to invent. We must persist in developing new tools and improving our old ones, and we must make the extended effort and sacrifice of actually producing them. The totalitarian society, having the benefit of our pioneering work, need only suffer through the imitation gap; whereas we would have to start from scratch, without the benefit of their labors, if we allowed them to get the technological jump on us.

In short, surprise is not only possible; it is now easier to achieve, and it is deadlier. We must, therefore, prepare ourselves with the understanding that surprise itself is not the overwhelming danger. Rather, it is the inability to deal with a surprise situation. Above all, we must not live in the illusion that great surprises cannot now occur. We have been surprised in the past. We will be surprised in the future.

We must be so experienced and so alert that the surprises we shall inevitably receive will not prove disastrous to the nation.

THE FUTURE OF THE ATLANTIC ALLIANCE

BY THEODORE C. ACHILLES

Summary of Remarks

Ambassador Theodore C. Achilles is Vice Chairman of the Executive Committee, The Atlantic Council of the United States, Inc.

Hopefully we have learned two political lessons from the tragedy of Pearl Harbor.

One is negative, namely, that the surest way to invite attack is to give the impression of being unprepared for war, or unwilling to fight back, of being afraid, divided, or committed to neutrality. We have had to learn this lesson the hard way, particularly during the years 1914 to 1917 and 1939 to 1941. I hope we have learned, although twice already since World War II we have slipped in Asia: first in 1949 and 1950, when we allowed the Communists to believe that we did not consider Korea important to our security; and again in the 1950's, when we failed to make clear our interest in the preservation of an independent South Vietnam.

The other lesson is a positive one. It is that the surest way to prevent attack, by surprise or otherwise, is to make clear our ability and determination to reply to any attack with all our massive power. That lesson was reflected by the Senate in the famous Vandenberg Resolution of 1948, which requested the President to "Contribut(e) to the maintenance of peace by making clear (this country's) determination to exercise the right of individual or collective self-defense under Article 51 (of the United Nations Charter) should any armed attack occur affecting its national security." It was reflected again in the NATO and SEATO alliances, in our treaties with Australia, New Zealand, and Japan, and in a variety of arrangements with other countries.

And having thus demonstrated our willingness, we have also developed and maintained our ability to defend ourselves, through the steady development of our conventional and nuclear power, through military assistance to our allies, and through the NATO system of integrated command, planning, warning, communications, and logistical systems. This method has worked effectively in Europe. Not only has there been no aggression in Europe, but the Kremlin has been led to modify its threatening tone toward the West, to the point where many in Europe, and some in this country, are reluctant to pay the price of continued vigilance and preparedness. It has worked so well in Europe that it has also forced the Kremlin to shift the target of its major efforts to other parts of the world, and its methods from aggression or the threat of aggression to encouraging local "wars of liberation," infiltration, and subversion.

But we still have much to learn. Vietnam is a warning that we cannot single-handedly police the whole world. There may well be other and bigger "Vietnams," and more than one of them simultaneously. Nor can we expect much help from

our European allies in such episodes, so long as they consider these problems as unrelated to themselves, as solely American dilemmas. They certainly do now. Our European allies, recently shorn of their own colonial possessions, complacently enjoy an unprecedented prosperity and the sure protection of our nuclear umbrella, while at the same time charging us with a desire for political "domination" and, with considerable justification, with an inability to exercise effective international leadership.

How can we best combat Communist subversion and indirect, creeping aggression, which can be just as dangerous and far more insidious than direct armed attack? How can we enlist the wholehearted cooperation and the military, industrial, political, and psychological support of our allies in doing so?

During the debate on ratification of the North Atlantic Treaty, Senator Vandenberg made a prophetic statement. "Unless the Treaty becomes far more than a purely military alliance," he said, "it will be at the mercy of the first plausible Soviet peace offensive." NATO's present troubles prove the wisdom of his words. The alliance has failed to adapt to changing circumstances, and thus far has proved unable to develop the positive political, economic, and psychological potential of the North Atlantic Treaty.

How do we go about these tasks? Certainly we cannot afford to let down our guard, so long as the military capabilities of the USSR continue to be, and those of Red China seem likely to develop into, a threat to our national security. But even more important is to get on with the positive effort of building the kind of world we would like to see even if Marx, Lenin, Stalin, and Mao had never lived. The United States cannot do it alone. On the other hand, we and our allies of the Atlantic community constitute the greatest bastion of military, industrial, scientific, intellectual, and moral power in the world, if we can but learn to use it effectively together. In President Kennedy's words:

> "Acting on our own by ourselves, we cannot establish justice throughout the world. We cannot insure its domestic tranquility, or provide for its common defense, or promote its general welfare, or secure the blessings of liberty to ourselves and our posterity. But joined with other free nations, we can do all this and more. We can mount a deterrent powerful enough to deter any aggression and ultimately we can help achieve a world of law and free choice, banishing the world of war and coercion."

We can move steadily in this direction by quiet but determined United States leadership to seek common or harmonized policies with our allies, and concerted action on major matters of mutual concern in the political and economic as well as the military field. This means listening as well as talking, taking the interests of our allies into account in the process of policy formulation, demonstrating in practice that we seek not "domination" but rather the joint use of the power of the Atlantic community in the pursuit of common objectives.

Indeed, we can move in this direction even without radical change or innovation. But this may not be fast enough for the next generation. In the 1968 presidential election, there will be 26 million eligible voters who were not yet born at the time of Pearl Harbor. I hope this new generation will remember the main lesson of Pearl Harbor. It is that the surest way to avoid aggression is to make clear in advance that we have both the determination and the ability to respond overwhelmingly. I also hope that they will do far better than we have done to build the kind of world we and they want to see, the kind of world in which freedom can endure and prosper, the kind of world President Kennedy envisaged and that President Eisenhower had in mind when he stated in his farewell message to NATO:

> "Together we must build a Community which will best safeguard the individual freedom and national values of our various peoples and at the same time provide effective means of dealing with problems with which none of us, alone, can now deal effectively."

PRIORITIES FOR UNITED STATES POLICY IN EUROPE

BY HENRY A. KISSINGER

Summary of Remarks

Dr. Henry A. Kissinger is Professor of Government at Harvard University and a staff member of the Center for International Affairs.

The current NATO crisis was touched off by the peremptory French decision to withdraw from the integrated military commands of the alliance. But the sources of the crisis go much deeper than this. In many respects, our present difficulties stem from the success of previous policies. The original concept of NATO was correct for the situation which then existed. But we must recognize that the relationship between Western Europe and the United States, as it has developed since World War II, now stands in urgent need of revision. The whole structure and priorities of the Atlantic Alliance must be reconsidered.

Some Policy Issues Before the Atlantic Alliance

It may be useful to begin by summarizing some main threads of United States policy toward Western Europe since World War II. First, we have supported the notion of an equal partnership between the United States and Western Europe, with an equitable sharing of responsibilities as between the twin pillars of this Atlantic partnership. Second, we have conceived of the political and economic integration of Europe as a prerequisite to formation of an effective Atlantic partnership, and we have viewed such integration in terms of the evolution of supranational federal institutions controlled by a European parliament. Third, while the United States has advocated a twin pillar concept in the political and economic spheres, we have consistently urged an integrated military defense, including the central command and control of nuclear weapons.

A great advantage of this overall approach was that the United States offered a clear-cut policy at a difficult stage in postwar history. But unfortunately, we have tended to look upon it as the only conceivable pattern of relationships, which it is not. Moreover, the American view has always contained some inconsistencies, such as the depreciation of the value of the nation state in Western Europe (where the idea of nationalism first originated), at a time when the nation state was still viewed by us as perfectly natural in the emerging areas of the world, and nationalism as a positive good in Eastern Europe. Another inconsistency was our insistence upon the general validity of the American experience in federal institutions, which ignores the unique circumstances that have made possible the success of the American federal experiment, and also overlooks the strong sense of national identity among the states of Western Europe, especially France and Britain.

President de Gaulle has proclaimed a profoundly different view of Atlantic

relationships and European unity. In part, no doubt, his brutal tactics and arrogant style have been designed to restore to France a sense of self-confidence and national power, which were all but destroyed by defeat in two world wars and by the bitter disappointments of the early postwar period. In a sense, the object has been to teach his country and his continent the attitudes of independence and self-reliance; and this is, indeed, an act of historic importance. In substantive terms, de Gaulle is wary of integration in any sphere, but particularly in the military field. Where the United States believes in the obsolescence of the nation state, especially in Europe, de Gaulle passionately affirms its continued role. De Gaulle's concept of Europe is based upon the free agreement of governments. He insists on autonomy in matters relating to nuclear weapons. Recently, apparently having despaired of the long term prospects for Franco-German cooperation, which would be essential to his overall approach, he has begun to resurrect the notion of an historic Russo-French understanding.

De Gaulle's tactics should not blind one to the deeper challenge of his policies. There is much to be said, for example, for his view that a political unit must mean something to itself before it can mean much to others. Unfortunately, his imperial style has often blinded others to the substance of his views, and his brutal tactics have thwarted the accomplishment of his aims.

The main victim in the current crisis of NATO, however, has been the Federal Republic of Germany. Whether by accident or design, Bonn has become the focus of almost every aspect of the crisis. Here the question is whether the fundamental balance and prospective solidarity of the Federal Republic since World War II can stand such persistent pressure. Behind the facade of prosperity and well-being, the sense of impermanence and insecurity in West Germany is absolutely central. The present German nightmare is a reappearance of the historical isolation which for most of its history has forced Germany to confront hostility on all its borders. Today the dominant German aspiration is to escape the burden of difficult choices. If the Federal Republic becomes the focal point of all European tensions, the Germans are likely to turn upon the apparent cause of their isolation. We in the United States must not find ourselves in this position.

Alone among the Atlantic powers, Germany cannot be satisfied with the territorial status quo. But since the Berlin Wall in 1961, Germany's hope that the ultimate goal of unification could be achieved by progressively closer integration within the Atlantic Alliance has been shattered. NATO is no longer the clear road to reunification. It is in this context that efforts to relax East-West tensions are judged by the Germans. They are uneasy lest the relationship between East and West Germany become frozen. Hence their concern with "central agreements" affecting East-West relations unless they bring about some visible progress on the German question.

West Germany has emerged as the balance wheel of the Atlantic Alliance. Every crisis seems to focus on Bonn. But West Germany's internal structure may not be equal to this strain. The dominant political parties, now restrained by their

desire to act as responsible trustees of an acceptable concensus, could well be torn apart, and extremist tendencies liberated thereby. Incipient schizophrenia is an integral part of political life in West Germany. The volatility of the situation imposes a requirement of great circumspection on American policy. The insecurity of German leaders and their desire to be good allies cause them to go along with many American proposals. But there is a limit to how much they could take. A break with France which could be ascribed to American pressure might, for example, easily backfire on us. The same could be true of the possible frustration deriving from overtures toward East Germany. What the Federal Republic needs above all is solid, reliable allies. It cannot stand to be the focal point of all international pressures.

The nuclear problem has been at the heart of NATO debate in recent years. But this misconceived the central issue, which is to adjust United States relations with Western Europe, and relations between the Communist bloc and the free world, to new conditions. The nuclear control issue cannot be solved by any so-called "hardware" solutions. In any case, the question diverts attention away from the cardinal problem of political cooperation to an intensely divisive side issue. If a coordinated diplomacy could be achieved, the problem of nuclear control would seem less crucial. If such cooperation cannot be developed, theoretical voting formulae for entering nuclear war will prove empty. The primary guarantee for our allies is a harmonization of political objectives so that their concept of their vital interests is virtually indistinguishable from our own.

Where Do We Go From Here? Some Policy Suggestions

Let me briefly summarize some of the long term goals which should guide United States policy in the period ahead.

First, we should encourage a greater degree of political and military autonomy for Europe. This is essential for the cohesion of the West, and is in our own long term interest as well. Any attempt by the United States to play a major role simultaneously in every part of the globe is beyond our psychological resources, however great our physical resources may be. We should encourage Europe to take a greater responsibility in the world, for our sake as well as its own. Moreover, we would benefit from a political counterweight which would discipline the occasional impetuosity of American policy and supply historical perspective to our penchant for abstract political solutions.

The central task is to encourage a European sense of responsibility. Europe as a Third Force in the sense of being powerful and active in world affairs is in our interest, even if its internal structure does not follow our preferred prescriptions. There is little to fear in the outcome. A Europe assuming greater responsibility for its own foreign policy and defense will be bound to recognize that only one potential threat to its security exists, and that in every conceivable case this threat could be met more effectively with United States assistance than without it. It is hard to

visualize a deal between the Soviet Union and Europe which jeopardizes our interests or security and which did not jeopardize European interests and security first. Such an approach requires, however, great restraint on the part of the United States and a high degree of tolerance and wisdom in coming to terms with a more dynamic Europe.

How much integration do we really want in Europe? Many argue that Europe is reluctant to play a global role today primarily because of the inadequate resources of the individual states. They argue that a unified Europe would assume greater global responsibilities, and that, therefore, the proper policy is to urge more integration and to press for European unity. This view is vastly oversimplified. There is no automatic relationship between power and a willingness to play an international role. Having just relinquished their overseas possessions, the European countries no longer consider their security to be directly affected by what happens in such remote corners of the globe as Southeast Asia. They are quite willing to shift the risks and burdens to us. Our allies may be expected to assume their portion of the responsibility only when we all share the same view of the international political environment, at least as it affects Europe, and when they are persuaded that the United States will reduce its contribution unless they play a greater role.

Thus it seems appropriate to consider how much integration we really want. Progressively greater integration will generate increasing demands for European participation in global decisions. This leads to the curious position that our allies at one and the same time reduce their defense contributions while pressing for increased political influence. In such a system policy may grow stagnant. The alliance will be able to agree only on doing nothing. Of course, we should cooperate with the Europeans wherever possible. But in the long term, excessive concentration of decision making may deprive our allies of the incentive to act responsibly, and may open up political fissures when a conflict of interests becomes apparent, especially in crises outside of Europe.

With respect to military integration, steps should be taken to reduce the dominant position of the United States in the NATO Alliance. In the 1950's, a dominant position for the United States seemed to our allies the best guarantee of our commitment to the defense of Europe. Their interest was in the symbolic, not the substantive, aspect of NATO. Such a state of affairs cannot be healthy in the long run. An area so rich and potentially so powerful as Europe should not leave its defense to a country three thousand miles away. The present system encourages too many of our allies to shift the costs and responsibilities of the common defense to us.

Europe will not assume a larger share of the burden until it also shares a larger responsibility. While modern technology requires the maintenance of integrated military commands, the relative weight of Europe in the command structure and in the NATO organization should be increased. In every other field, American policy has deliberately sought to reduce Europe's dependence on the United States.

In the military field, by contrast, the United States has not encouraged the emergence of a specifically European point of view.

As already indicated, so-called "hardware" solutions to the nuclear issue do not seem fruitful. Since the problem is essentially political, the Special (McNamara) Committee should be given the task to formulate common strategic doctrine and common disarmament policy. Within its framework, the European countries could begin to build a closer association if they wished to do so. As Europe gains stature, the Special Committee could draw nearer to the twin pillars concept. Atlantic partnership and increased European cohension thus could be pursued simultaneously, with no commitment in advance to giving priority to either course.

If this solution does not satisfy our allies over the long term, a European nuclear force would be preferable to any apparent "hardware" solution that has been discussed. Indeed, it is likely that nuclear autonomy would be the least divisive form of European unity, and would include few risks for the United States. Whatever their formal autonomy in the nuclear field, it is highly improbable that our allies would prefer to go to war with the relatively small nuclear forces that would be available to them without the support of our necessarily preponderant arsenal. Close cooperation between Europe and the United States in the nuclear field is dictated by mutual self-interest, and Europe has more to gain from it than the United States.

COMMUNIST CHINA'S MILITARY CAPABILITY AND THE STABILITY OF ASIA

BY RALPH L. POWELL

Summary of Remarks

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I should like to shift your attention from Europe and NATO to the growing problem of security in Asia. I shall consider very briefly the following four points: first, the conventional armed forces of Communist China; second, and more important, their development of nuclear weapons and ballistic missiles; third, some indication of what they may plan to do with this increasing military capability; and finally, the impact that all this is having on our friends and allies in Asia.

It is, of course, impossible to present a completely accurate picture of the armed forces of Communist China. But I believe that it is possible to offer an evaluation that will outline the general parameters of their military strength and capabilities.

The conventional armed forces of Communist China are the third largest in the world, next only in size to those of the United States and the Soviet Union. This includes the largest land army in the world, a force of about 2.3 million men. It is still essentially a World War II or Korean-type army, with modern arms but not the most advanced military weaponry. It is, however, a tough and well-trained military force.

The air force of Communist China is the world's third largest. It has become increasingly obsolescent since the Soviets withdrew their military assistance in 1960. But, as in other fields of military development, the Chinese Communists are developing an increasing capability for manufacturing jet aircraft themselves, and the quality of their air force is now improving again. They now have about 2,300 planes; somewhat less than 2,000 of these are jet aircraft, mostly obsolescent MIG 15's and 17's, but there are an increasing number of supersonic MIG 19's and some high-performance MIG 21's.

The navy has always been the weakest of Communist China's armed forces. It is essentially a coastal defense force. Yet Peking does have a fleet of about 30 submarines which, as their crews receive more deep water training, could become a serious threat. Also, Communist China is now reported to have operational a "G" class Soviet-type submarine with three missile tubes capable of firing ballistic missiles with a radius of about 400 miles.

The conventional forces of Communist China have certain special strengths. First, of course, is their very size, and the availability of almost limitless military

reserves. The mere size of these forces tends to frighten mainland China's small Asian neighbors. Furthermore, Peking's senior military commanders are probably the most experienced combat leaders in the world; many of them have had more than twenty years of almost constant combat experience. The younger officers have been carefully trained in a whole hierarchy of modern military schools. The enlisted personnel are intelligent and tough. Finally, the whole force is certainly the most highly indoctrinated military establishment in the world.

Yet, despite their great strengths, the armed forces of Communist China still have some very important weaknesses. Of course, the primary weakness is that they still do not have a meaningful nuclear capability, although they are rapidly developing one. Secondly, the Chinese economy is still only partially developed, and remains incapable of producing all the advanced conventional military hardware necessary for large scale war. But here again, they are producing more and more sophisticated materials in the conventional hardware field every year. Finally, the Chinese Communists have a vast conscript force in being, but they suffer from many of the problems characteristic of large garrison forces which have long been at peace—at least, as far as the bulk of their forces are concerned.

Much more critical to the security of the United States and to the peace of the world is the development of a nuclear capability and a missile delivery system by the Chinese Communists. Western specialists have seriously underestimated the capacity of the Chinese Communists in these respects. Since October 1964, the Chinese Communists have carried out four atomic tests, and Washington has recently announced that they are preparing to carry out a fifth. The first two tests were essentially of atomic devices similar to the Hiroshima bomb of 1945. But the third test, in May 1966, was a weapon ten times as powerful, in the range of something over 200 kilotons; and the fourth test, which took place in October, is believed to have been a weapon capable of delivery by a missile having a range estimated at about 400 miles.

Thus the Chinese Communists are rapidly building up a meaningful nuclear capability. They are testing warheads, and it is obvious from the experiments they have been carrying out in the missile field, that they are going to put heavy emphasis on the development of missilry. Indeed, Secretary of Defense McNamara has stated that the Chinese Communists will probably begin to deploy medium range ballistic missiles capable of threatening their Asian neighbors by 1968 at the latest; and that by 1975-80, Communist China will probably begin to develop ICBM's capable of striking at the continental United States.

Now that the Chinese Communists are beginning to develop a real nuclear weapons capability, what are they apt to do with it? What is their doctrine in this field? While their doctrine has not yet been fully enunciated, there are several things that we do know about it. First, in terms of general foreign policy, both the imperial heritage of the Chinese Communists and their Communist ideology tend to make them expansionist and aggressive. But this must be understood in a revolutionary sense. They have as an announced objective the support of revolution in all

the underdeveloped areas of the world, and presumably they will attempt to use their weaponry to support these objectives. And yet, the Chinese Communists are not irrational, despite the violent and vitriolic character of their propaganda. In actual practice, the conduct of foreign policy by the Chinese Communists since the Korean War has been more prudent, more cautious, than their violent propaganda would indicate. I would assume that this element of prudence, which is actually an integral part of Mao Tse-tung's revolutionary doctrine, would continue to have some bearing on the future. Hence it was not really necessary for Khrushchev to inform Mao Tse-tung that the American "paper tiger" had thermonuclear teeth. The Chinese Communists were already aware of it. Indeed, it is part of their doctrine that although the enemy should be despised strategically, he must under all circumstances be respected tactically. Up to this point in time, they have followed their own military doctrine in this respect with great care.

Hence, specialists tend to believe that the Chinese Communists will utilize a relatively small nuclear capability primarily to support political and psychological strategies, including atomic blackmail. During the next decade, they may very well attempt to use a limited nuclear capability to make nuclear hostages out of our friends and allies in Asia. One of their basic objectives, frequently stated by them, is to force the United States out of Asia. I believe they will use their increasing military capabilities in an attempt to achieve this objective, but primarily by attempting to put pressure on our friends and allies so that they will force the United States to give up its bases in the Pacific islands and on the Asian continent. Furthermore, since they claim that their official policy is to support all so-called "wars of national liberation"—what we would call revolutionary wars or insurrection—throughout the world, they may in the coming decade be more willing to risk intervention with their own conventional forces in conflicts around their frontiers. (This assumes that the West would not be willing to use atomic weaponry against Chinese forces if the latter have some nuclear capability.)

What, then, has been the reaction of our friends and allies in Asia to the development of a nuclear capability by Communist China? Interestingly enough, following the first two tests of Hiroshima-type devices, there was much less reaction than we had expected. In part, this arose from the fact that in each case the United States government had announced in advance the Chinese Communists' intention to carry out a nuclear test. (Washington has done this again in the case of the upcoming fifth test.) This advanced warning tended to take away the psychological "shock" impact of the tests. Also, we were attempting to inform our Asian friends that there is a tremendous difference between an initial atomic test and the development of a sophisticated nuclear capability. Sometimes I think we have almost overeducated our Asian friends on this subject.

Asian reaction to the third and fourth tests, however, has been considerably more serious, and for good reasons. This was partly because the third test was so much more powerful than the first two, and partly because the fourth test was delivered by a ballistic missile. Still, there has been no panic among our Asian friends. But it is clear that the development of a nuclear capability by the Chinese

Communists is going to create some serious problems for the United States in Asia. One of these, incidentally, is the question of proliferation. The development of nuclear weapons by Communist China is putting increased pressure on the governments of Japan and India, especially, to develop atomic weapons themselves. Second, in the long run the development of a nuclear weapons capability by Communist China will probably produce two very different reactions among our Asian friends and allies. Some of them, fearing that United States determination to defend them may falter, may seek an accommodation with Communist China, in which case they would probably demand the withdrawal of American bases from their territory (this being a primary objective of the Chinese Communists). On the other hand, a more widespread reaction would probably be a demand on the part of our friends and allies for greater protection against Communist China, for the extension of a stronger nuclear umbrella over them.

Hence the development of a nuclear weapons capability by Communist China is going to have several important implications for United States policy. It will impose a major test on the credibility of the United States nuclear deterrent in Asia. I would doubt whether our Asia friends and allies will put as much faith and credence in the United States deterrent, and in American willingness to defend Asia, as our European allies, in general, have placed in our readiness to defend Europe. As the Chinese Communists develop a capability to destroy Tokyo, or Manila, or New Delhi—and especially when they develop an ICBM capability to strike the United States itself, our Asian friends may understandably question whether the United States would be willing to endanger San Francisco, or New York, or Washington to defend Tokyo, or Taipei, or New Delhi.

And in the longer run—but certainly in less than two decades, the Chinese Communists will probably develop a capability actually to threaten the basic and fundamental security of the United States itself. This is going to be a much more serious problem. In short range terms, this involves us deeply in the whole debate over the development of an anti-missile missile program, that is, an ABM program within the United States. One of the major arguments is going to revolve around the question whether we should develop an anti-missile missile program aimed not so much at the Soviet Union as at Communist China's much less sophisticated nuclear capability.

In short, during the decade ahead the development of a significant nuclear capability on the part of Communist China is going to have a serious impact on our foreign policy, particularly our policy in Asia. And later on, its impact will be felt on basic national security policy itself.

ABM SYSTEMS AND INDETERMINATE OUTCOME DETERRENCE

BY RICHARD B. FOSTER

Summary of Remarks

Dr. Richard B. Foster is Director of the Strategic Studies Center, Stanford Research Institute.

The fundamental basis for the defense of the United States, and also Europe, from direct nuclear attack by the Soviet Union or Communist China is closely related to the concept of deterrence. But we sometimes forget that the nature of deterrence changes over time. Deterrence today, as between the Soviet Union and the United States, is based on a belief shared by both sides that either side can inflict unacceptable damage upon the other by destroying cities—with their population, wealth, and cultural values. Inhibitions against the use even of tactical nuclear weapons for limited purposes is closely related to this. That is, both sides are deterred from initiating the use of tactical nuclear weapons in military conflict largely because such a conflict might easily escalate into general war; and general war in the nuclear age could result in the obliteration of both societies. In short, both sides have been deterred from the use of nuclear weapons through fear of national destruction.

But the deterrence implicit in this balance of terror can change. There are possibilities within technology today that may alter the very nature of deterrence from a guarantee of mutual destruction, to a deterrence based upon the concept of the uncertainty of outcome either of general war or of limited nuclear conflict. This prospective change derives from the possibility of developing an effective defense against ballistic missiles, that is, the so-called ABM defense system.

If the Soviets continue to deploy an ABM system which they consider to be reasonably effective, and thus in their judgment achieve some balance between missile offense and defense; if they also proceed with a greatly increased rate of deployment of their ICBM's; if, finally, they deal with fallout problems, at least to some extent, through increased efforts in civil defense; then they could conceivably achieve a military posture in the 1970's which would give them a fundamental strategic advantage over the United States. This country would necessarily continue to base its nuclear strategy on the concept of assured destruction of Soviet cities by building an ever increasing offensive force to overcome the Soviet ABM system. The Soviet Union, on the other hand, may have moved to a concept of indeterminate outcome deterrence. This would give the Russians an opportunity to act decisively in the diplomatic arena, whereas the United States would have to respond with much greater timidity. To be sure, any transition to a nuclear strategy based on indeterminate outcome deterrence will be prolonged over time. This is due primarily to the fact that, although the technology of defense has been advanc-

ing more rapidly than the technology of offense in recent years, it takes time to incorporate this new defense technology into operational weapons systems. Secretary of Defense McNamara has estimated, for example, that it would take the United States seven years to develop and deploy the Nike-X into an operational ABM system.

One of the great problems posed by any ballistic missile defense system is whether it will work. So long as deterrence operates, the whole complex can never be tested. It is the uncertainty as to how well a ballistic missile defense system would work in the future—say, in 1975—that poses the most difficult problem for decision making today. Even if we go to the expense of deploying such a system, we cannot be sure that it would be effective.

Despite this uncertainty, however, it would be a very great gamble indeed for the United States not to proceed with the development and deployment of such a system. We cannot afford to run the risk that the Soviet Union would have unilateral possession of both offensive and defensive systems in combination, that they alone would have mastery of changing concepts of deterrence, and that we would have to contemplate the destruction of American cities without the sure ability to retaliate effectively. For we would be faced with uncertainty as to how well their ballistic missile defense system of cities would work; while they, on the other hand, would be confronted with no such system on our side, and they could predict with some certainty the damage they could inflict on undefended United States cities. An inevitable consequence of this would be the erosion of the American alliance system, as our allies all over the world lost confidence in the American nuclear umbrella, and perhaps eventually in the common sense and political wisdom of the American nation as well.

But let us give thought to a world in which both sides are roughly in balance with respect to offensive and defensive weapons systems. I would suggest that this new world would be much more stable than the world we have lived through during the past ten years. For example, it would provide a measure of protection against psychotic or accidental launches, or against *n*th countries firings. In this latter respect, the concept of indeterminate outcome deterrence represents insurance against the probable failure of our policy on the nonproliferation of nuclear weapons—at least with respect to Communist China.

It might also represent a major step in solidifying our relations with allied countries by making possible the sharing of defensive ballistic missile technology. This is very complex and costly technology. Sharing it with our allies would do much to improve relations with them. But we have this opportunity only so long as we do not lock ourselves into an irrevocable decision not to deploy an antiballistic missile defense; or, if we deploy it, to determine nevertheless to keep it to ourselves. Here the initiative is ours for a few years only. It is a major initiative that could be taken to reform and rebuild NATO, and to give that alliance new direction and new meaning.

Another possible consequence of such a world of indeterminate outcomes might be to permit the selective transfer of tactical nuclear weapons to allies to be used for defense against local aggression, and thereby to give a new dimension to deterrence working at very low levels. Where the fear of escalation can be controlled, the use of nuclear weapons for local defense may become a much more realistic policy than to attempt to build up conventional forces.

I would suggest that it is necessary for the American people to gain a better understanding of the rapid changes that technology is bringing about, particularly with respect to military defense. Unless we grasp this problem, the United States may lose its strategic superiority in the 1970's. We must quickly face up to the problem of whether to proceed with our own ABM defense at a time when the Soviets are already rapidly deploying theirs.

THE FUTURE OF SOVIET CYBERNETICS

BY JOHN J. FORD

Summary of Remarks

Dr. John J. Ford is Professor of Cybernetics at The American University.

Foreknowledge of what the next quarter century holds for science and technology is as important in determining priorities for peace as it was 25 years ago in mobilizing for war. Then, the prescience of Vannevar Bush, J. B. Conant, R. C. Tolman, K. T. Compton, and others led to one of the most important prewar strategic moves made by the United States: President Roosevelt's approval on June 27, 1940, of the order establishing the National Defense Research Committee. During the eighteen months prior to Pearl Harbor, this organization devised an unparalleled system of central laboratories for mobilizing America's scientists for the then imminent conflict. When the attack came on December 7, 1941, the NDRC was well along on a series of crucial projects: the potent explosive RDX, radar, the proximity fuse, incendiary bombs, and on developments which led eventually to Alamogordo:*

It is to the lasting credit of that handful of American scientists who made their foreknowledge available to their government that they recognized not only the imminence of hostilities but also the rapidity with which the face of war would be changed by technology. They foresaw the movement of technology toward a turning point in the broad history of civilization at which science would be applied to destruction on a wholesale basis, thereby superseding warfare as it had been waged for thousands of years by the direct clash of hordes of men.

The Germans, meanwhile, failed to recognize the signs of the times, and clung to the old idea that no decisive new weapon could be introduced in the short war they contemplated in 1939. Because of their existing stockpile of excellent weapons, they felt no need of any great organization for the development of new weapons, no mobilization of their vast resources of scientific personnel, no requirement to ensure an atmosphere of scientific freedom for wide ranging experimentation within the meshes of their huge military system. German academic scientists could be left to their peacetime researches. Even in the military laboratories, fundamental research was greatly curtailed if not entirely dropped. Basic research on radar, for example, was stopped on Hitler's orders in 1940, and was not renewed until 1942.

The Germans made a belated effort after the false hope of a short war had gone glimmering. Professor William Osenberg, of the Technische Hochschule at

*Following the declaration of unlimited national emergency by the President on May 27, 1941, President Roosevelt issued Executive Order No. 8807 on June 28, 1941, establishing the Office of Scientific Research and Development in the Executive Office of the President, which took over the contracts of the NDRC for scientific and medical research.

Hannover, became head of a committee to review the availability of academic and research personnel for war problems. In January 1943 he was assigned to the *Reichsforschungsrat,* an organization similar to OSRD but long inactive. Just before the German surrender, Osenberg complained that "Germany lost the war because of incomplete mobilization and utilization of scientific brains."

This capsule history of the scientific front in World War II should be recalled in attempting to forecast what the future holds for science and technology, and in determining the priorities for peace. Foreknowledge based on an awareness of "the signs of the times" is as critical to survival in 1966 as it was in 1940. If we are to profit by the wartime mistakes of Germany, we must maintain—as the Germans failed to do—that vital rapport between scientists and government which is the basis of anticipatory-adaptative responses to the patterns of profound change in the world about us. For those changes portend another turning point in the broad history of civilization at which the outcome of international political competition will be determined by the relative capabilities of the contestants for the application of science to social development. Secretary of Defense Robert S. McNamara and Lieutenant General James M. Gavin have discussed these portents in recent publications.

From the USSR come indications that the Soviets share this interpretation, and that, in consequence, Soviet scientists and technologists are being mobilized rapidly. The Soviets give a somewhat unique characterization to this new turning point in history, and describe it as a shift from dependence for security upon instruments which magnify the power of the human fist to reliance on means which multiply the power of the human brain. This new stage in applied rationality is said to imply international competition in the development of such means, and in their employment in a new type of conflict in which victory will go to that social system with the greatest proclivity toward, and most advanced techniques for, the development of its own and foreign societies, and not to the contestant with a superabundance of destructive power. The novelty of this strategic concept, with is strains of "peaceful competition," heightens its insidiousness. With a beginning unannounced by bugles or bombs, it could go undetected to an end marked, in the words of T. S. Eliot, "not with a bang but with a whimper."

One of the many signs signifying the mobilization of scientists in accordance with this strategy was the establishment by a small group of Soviet scientists in 1959 of the Cybernetics Council under the Soviet Academy of Sciences. That group, directed by Admiral A. I. Berg, includes 13 academicians, 30 corresponding members of the Academy, more than 200 doctors of science, and 400 candidates of science. Similarly, the number of research projects planned and supervised by the Cybernetics Council has risen from 170 in its 1963 program to more than 400 tasks currently programmed.

The goal of this cybernetics program is to provide scientific and technological means for the optimal control of complex, purposive systems. "To control," in this context, means simply to combat the disorder or disorganization toward which

large systems tend when they fail to interact appropriately with their external environments. Such interactions involve information processes, so that as the quantity of "control" information increases, the disorder of the system decreases. For this reason, top priority within the Soviet cybernetics program is assigned to studies of information processes in living systems, machines, and societies, for the purpose of finding methods and equipment which will increase the effectiveness of human activity in the sphere of information processing. This sphere is taken to include education, management of the national economy, defense, transportation, science, electrical power distribution, law and government, industrial production and distribution, and the other complex activities of human societies.

To those in the USSR who foresee the advent of a cybernetic era, social change is inevitable. But the rate and direction of these transitions are subject to human influence. Their argument goes on to postulate that these changes will be evolutionary or devolutionary, progressive or regressive, developmental or atrophic, depending upon the degree of success achieved by any transitional society in applying cybernetics or other media of applied rationality to engineering the organization of the emergent states. The task of the Cybernetics Council is to insure that a system of social organization will be devised by the USSR which will prove to be the optimal variant in this evolutionary struggle involving total social organisms, and not just their military arms.

If the National Strategy Information Center convenes a conference in December 1991 to commemorate the 50th anniversary of Pearl Harbor, our successors at that time will be better able than we to evaluate whether Admiral Berg and his coterie perceived the "signs of the times" correctly in 1959, and if the consequent adaptive organizational changes were as appropriate as was the creation of the National Defense Research Committee in anticipation of the entry of the United States into World War II.

CYBERNETICS IN THE SERVICE OF COMMUNISM

BY RAYMOND S. SLEEPER

Summary of Remarks

Colonel Raymond S. Sleeper, USAF, has command of the Foreign Technology Division, Air Force Systems Command.

In Russia, cybernetics seems to offer the means to optimize the continued development and growth of the power of the Soviet Union, the subversive capture of free nations, and the establishment of worldwide educational, technological, military, and space superiority. But more important, cybernetics is now seen by some Soviet authorities as the means of facilitating the optimum (Communist) control of the complex system of states, peoples, and resources of the world which the Communists hope will result from Communist world domination.

In practice, the Soviets appear to be classifying almost any subject that has to do with information and control in man, machine, and society as cybernetics. Cybernetic systems, as opposed to automatic devices, are capable of responding in a predictable, orderly manner to changes in the environment. An example of a crude cybernetic system is the home furnace that responds via thermostatic control to changes in temperature for the purpose of maintaining a reasonably constant temperature in the home. One of the first complex cybernetic systems developed was Norbert Wiener's design of a system to link radar through a computer to a battery of automatic anti-aircraft guns.

Wiener's great achievement was to synthesize existing technology and ideas into a basic conceptual framework that unified this technology to produce a high degree of control in any type of complex dynamic system. The basic elements of this concept are:

(1) A well defined goal or end state to be achieved.

(2) Sensors to detect changes in the environment, such as temperature, velocity, chemical reactions, learning states, and so forth.

(3) Communications nets concerning all elements of the system to assure information flow.

(4) Logic units to process the information flow according to criteria contained in the goal.

(5) Control units that are responsive to decisions from the logic center (4), which adjusts system units to the desired states as information from (1), (2), (3), and (4) changes.

Cybernetics, as it developed under Wiener and in the USSR, imposes a rigid discipline for clear thinking upon both the theorist and the practitioner. If a true

cybernetic approach to problem solving is adopted, the planner must first define his goals and the criteria for their achievement as clearly and with as little ambiguity as possible.

The Thrust of Cybernetics in the Soviet System

The thrust of cybernetics in Russia extends from the microbiological to the macrocosmic dimensions of man's relationship to the elements of the universe. The volume of Soviet literature on cybernetics is monumental. A. I. Berg, chairman of the Soviet Cybernetics Council, refers to over 5,000 articles in 1961 alone on "the problems of the application of mathematics, electronics, and cybernetics to biology and medicine." Since 1961, the volume of literature and research on this subject has continued to increase.

Soviet cybernetics includes, in addition to biologic and physiologic control techniques, a broad program of research in neurology, psychology, and related fields, especially those areas which have the potential for technological application and behavior control. The USSR is planning for rapid development of automation, and encourages cybernetics at the highest level of government and party. Social adjustment to automation is planned through the preparation of students to accommodate to the "cybernated society." And, according to the Soviets, the change will therefore be more orderly in Russia than in any other country.

At the machine level, the applications vary from guidance systems for missiles to automated power distribution centers for controlling the flow of electric power between widely dispersed nets so as to eliminate costly, redundant power generation. But it is at the socio-economic level that one sees the major innovations being attempted in the Soviet Union. A cybernetics center is planned for each state. Several are already being built, and the first one at Kiev is nearly finished. These, together with the Cybernetics Council in Moscow, the Moscow information storage and retrieval center (VINITI), the Moscow computer center, the developing nationwide unified information network, some 350 computer centers, and over 100 institutes that are working in cybernetic science and technology, will constitute the physical structure of the program.

It helps us to take a serious view of these Soviet activities when we realize that such large scale modeling, and similar attempts to structure society, are actually beginning here in the United States. San Francisco is using an operating mathematical model of the city in terms of its land, buildings, peoples, jobs, amenities, and so forth, for forward planning purposes. Other American cities are now developing their own models. But the Soviet scheme involves all of Russia and promises to involve the world.

Probably the key to the major difference between the Soviet purpose of cybernetics and the purpose in the West is that the Soviets seem to be aiming at complete social reconstruction. It is not so much that the Soviets are already beginning to apply cybernetics to the optimum control of the entire Soviet society, but

rather that they are aiming to reconstruct society through the widest possible application of cybernetics, and eventually to employ it as the principal system of Communist control of the world. And there are indications of steady Soviet progress. "Soviet science is ahead in the analysis of random processes of shooting and random process representation; Soviet science is generally superior to U. S. science in the fields of detection theory, parameters, prediction and estimation, and the analysis of phase-keyed systems in the presence of fading; and Soviet science can be said to be slightly ahead of the U.S. sciences in the overall fields of cybernetics, logic algebra, automated theory, and pattern recognition." Cybernetics seems to have given the Russian leaders a new vision of the utopian future of Communist social progress. They now see in cybernetics (or so they think) a means to stimulate progress and to integrate advances in all fields of science. Again, the most fundamental and overriding point is that through cybernetics the integration of scientific progress now enables the construction of the ideal Communist society in Russia as well as throughout the world.

To reconstruct Russian society, to establish a system for the optimum control of Russia, and to embark upon the study, planning, and implementation of a control system aimed at restructuring the societies of the world so that they will dovetail into a cybernated Communist Russia, is a fantastic task. A model of how this world social structure will be achieved has been developed by the Communists. From a Communist viewpoint the whole process of "national liberation" and revolution involves the restructuring of capitalistic institutions and the development of Communist institutions in a purposeful mode.

The Transition of "Capitalist Societies" to "Socialist Societies"

This restructuring of "capitalist societies" to "Socialist societies" is the central aim of world communism. It is the object, the content, and the substance of Communist activities across the world.

There are Communist parties in some 105 nations in the world. In certain countries there is more than one Communist party; but for our purposes we shall assume that these parties are factions, and that ultimately these factions either coordinate, cooperate, or are controlled by the dominant party in their struggle to take over the specific country. Some 16 of these 105 nations are now controlled by the Communists. Each of these 16 nations is in fact ruled by the Communist party therein. It is generally accepted that the world Communist movement is no longer monolithic, but that polycentralism and a kind of "world commonwealth of Communist nations" is evolving and expanding through subversive aggression. In spite of these and other, doctrinal changes, a Marxist-Leninist model exists for the stages of Communist penetration and takeover in a target country. The doctrine elaborates the following steps (called "stages" in Marxist-Leninist terminology) in the "transition" to a Marxist-Leninist society:

1. *Step one* is infiltration into the target country and the formation of a Communist party.

2. *Step two* is the infiltration of Communist party members into the target country's key institutions.
3. *Step three* is the decision to seize power
4. *Step four* is to seize power.
5. Finally, *step five* is to consolidate Communist control of the nation. This involves the progressive elimination of all anti-Communist, uncooperative control and influence in the nation.

Thus one sees the total social, economic, and cultural restructuring of a target country to fit the Communist model. And the Communist model appears to be moving toward a cybernetics model. This may lead to increased rationalization of Communist subversive aggression against free nations. Under a cybernetics scheme, the Communists need not export traditional ideology. Instead they need only to export "scientific social changes" which fit the cybernetic model of the economy and social structure of scientific Marxism-Leninism which is now being built in Russia.

The Drive for Military Superiority

The Soviets have consistently pushed for worldwide military superiority. Stalin supported this goal, and so did Khrushchev, on balance.

Some top American nuclear scientists believe that Soviet nuclear weapons technology is at least equivalent to, if not ahead of, the United States, in some areas. In the area of high yield weapons, it is conceded that they have the edge. They have detonated a device of 60 megatons which we believe could be weaponized or turned into a weapon of about 100 megatons. In the area of aerospace weapons, we were somewhat surprised in 1948 that the Soviets copied our B-29's (which they called TU-4's). More surprising was that they built a significant number, and built them at the expense of more rapidly rejuvenating the wartorn civilian economy. Through the 1950's the Soviets built modern fighters in large numbers, and also bombers, and then moved into building and deploying ballistic missiles. There is no question that the American Minuteman and Polaris missiles remain superior to those of the Soviets, but the Russian weaponeers are not resting on their laurels. They are continuing to develop and deploy large numbers of new weapons of widely varying types.

One of the primary strengths of the Soviet research and development and production programs is the use of scientific planning (cybernetics) throughout their weapons programs. Scientific planning, gaming theory, optimum solution of complex problems, development of block-aggregate computing systems, creation of the scientific basis for the synthesis of automatic control, and hundreds of similar subjects, all relevant to the most modern techniques of scientific planning and development of aerospace weapons systems, appear in Soviet cybernetics literature. The hypothesis is suggested that analysis of overall Soviet power must now take into account the increased efficiency of the early applications of integrated cybernetic systems optimized for the strengthening of Soviet military and national security.

The Thrust in Space

Similarly, the impact of cybernetics can be seen in the Soviet space effort. Soviet work in space probably started in the early 1940's with the work of Tsilkovskii, the Soviet Goddard. In the late 1940's and early 1950's, it appears that the basic technologies and vertical firings of components were accomplished. In the late 1950's, we saw the first Sputnik and the beginning of the Soviet space spectaculars. There has been little direct evidence that any of these spectaculars will lead directly to Soviet military space capabilities, but there have been repeated Soviet references to the military uses of space.

In the United States, we argue variously that space offensive nuclear delivery forces are less efficient than ICBM's, less accurate, and less credible. But when the Soviets are dedicated to aggressive political objectives on a world scale, the possession of space military offensive forces may appear very useful for purposes of prestige, terror, persuasion, coercion, pressure, psychological warfare, and demoralization. The sight and sound of Soviet military orbital forces in the free skies of the world day and night, and Communist satellite TV and propaganda tuned into Free World sets around the world—all in the service of Soviet goals of worldwide Communist domination, would not be attractive to contemplate.

Such major steps in space could not be taken except for the progress that the Soviets are seeking through cybernetics. This has been recognized by Soviet scientists and has been openly stated by several of them. A description of the impact of Soviet cybernetics on their space program is included in *Cybernetics and the Cosmos* by V. Denisov, published in 1962. Denisov describes the working of the cosmic ship in detail, and then projects developments into the future, saying: "It can be that the foot of man will not take the first step on other planets, . . . but the foot of a cybernetic automaton may." He then goes on to extend man's influence into the cosmos through travel and communications, basing his predictions on progress in cybernetics, as well as in astronautics and related sciences.

Summary

There is not much question that cybernetics is seen by the Soviet elite, not only as the path to Communist utopia, but also as the road to development of a worldwide system of Socialist states under Communist control. This view is reflected even by the American Communist party: "Is there an inner compulsion in technological development which will transform the private appropriation of profit in America and the immense, unprecedented political power it brings, into an innocent surplus managed for the whole of society by the same small top group wearing different hats? . . . No . . . *Once the profit motive is no longer a sacred absolute,* the machines can be controlled, and, especially in the centralized society of today, cybernation can be developed and applied at a rate and in a manner that is in the interest of society as a whole . . . and *this will come . . . only when the American people make a daily struggle in a progressive direction*" towards communism.

If we wish to follow events in Soviet Russia reasonably intelligently, and developments in worldwide communism as well, we should begin to view them in terms of the changes wrought by the massive cybernation program in Russia and in the worldwide Communist movement. Moreover, if cybernation promises such a "paradise" for Socialist countries, and makes possible, in effect, a technological penetration of free nations, it behooves us to define the parameters of the possible impact, and the promise and direction of national and international automation in free societies as a counter. There is no doubt at all that American computer technology, program theory and applications, and automation lead the world. But even as this is recognized, we should also take note of the proliferation of computers, of computer languages, and of computer centers in the United States. We have become truly an electronic Towel of Babel. In Russia, by contrast, the computer centers, languages, and networks are planned and programmed to optimize control of the entire country. Does this lead to an efficiency of resource utilization that enables the Soviets, with a gross national product of $303 billion compared to $664 billion for the United States in 1965, to challenge us for world leadership and military superiority? Surely the redundancy, flexibility, and free choice in the American system are much more attractive to us. But is it too wasteful of resources? And is this American redundancy and flexibility optimized to meet aggressive, purposeful, international competition? Will widespread redundancy, flexibility, and choice invite penetration and restriction by a centrally controlled, integrated, and optimized system, a system optimized for the stated, announced purpose of world domination?

These are interesting questions that only time and intensive analysis will answer. Surely most Americans, if given the choice, will vote for redundancy, flexibility, and optimization of private opportunity as opposed to centralized, imposed, optimized control. However, the parameters of redundancy, flexibility, control, optimization, purposefulness, and private opportunity may have to be subjected to the crucible of public discussion and definition in the light of national interests before we have a full understanding of both the benefits and penalties of the promise of cybernetics. Nor can we begin to discuss and understand the national and international potential of cybernetics unless we devote adequate effort to the job. This we are not now doing, at least not at a level of effort that is competitive with the Soviets.

The level of effort and the progress made in Russia are a definite technological threat to the United States, because the multi-discipline attack taken by the Soviets on major problems has no counterpart in this country; and the broad, intensive effort of the Russians simply must produce, in due course, significant breakthroughs in sociological, economic, governmental, and military areas that we must be prepared to meet. This challenge is, therefore, a challenge to military superiority, to social control, to economic and industrial advance, and to world power.

Unless we Americans as a people understand these momentous trends, we may not have much choice. The system could be imposed upon us by a centralized, cybernated, world command and control center whose central cortex turns out to be located in Moscow.

SOME REFLECTIONS ON CYBERNETICS

BY HARRY D. GIDEONSE

Summary of Remarks

Dr. Harry D. Gideonse is Chancellor of the New School for Social Research.

What does the term cybernetics mean? This is a legitimate question, especially since the Russians use it in a somewhat different context than we do.

The Russians feel a need, when dealing with a new thought or concept which is deviant from the dominant intellectual climate, that is, from the currently accepted interpretation of dialectical materialism, to dress it up in such a way as to make it appear compatible with the dominant ideology. Fortunately, we do not have to do this in the United States. If a Harvard professor of physics wants to try out an idea which has not been explored by a colleague at Yale or Columbia, he can do so without reference to anybody. He does not have to wait until his idea is accepted as congruent with the prevailing party line before he is allowed to pursue his work. But such is not the case in the Soviet Union. Let me recall for you that when the Russians began to work seriously (and somewhat belatedly) on the physics of atomic energy, they had to confront some real conflicts between their research and the prevailing dogmas of dialectical materialism. For a number of years, some of the leading Russian physicists had their necks dangerously far out, simply because the philosophers of the official ideology disapproved of Einstein's physics. It took years of struggle before this problem was worked out through the development of some aesopian verbal formulas that would permit the physicists to go forward with their work even while the party line seemed to disapprove of Einstein's physics.

In a similar way, when the Soviet regime began to place heavy emphasis on electronics and the use of computers in the implementation of Soviet planning, there were great ructions within the Soviet intellectual community. Much literature was devoted to the question of whether or not this emphasis was compatible with the official ideology. Eventually a solution had to be worked out on the basis of some obscure passage in a pamphlet by Lenin which seemed to justify so much work on electronics and computers. Then, after the problem had been resolved after literally years of controversy (only part of which is apparent in the printed literature), the Russians proceeded to create a myth around the word cybernetics which is quite unlike the more sober concept which that term implies in the American scientific community. To put it briefly, in the Soviet Union the concept of cybernetics seems to suggest that the solution of economic and social problems, with respect to which we would consider cybernetics simply as a useful tool, would be generated within the social and material process itself. There is an implication here that somehow or other cybernetics plays a role in the Soviet Union that it does not play in the American scientific community.

We have a much more limited notion of this concept. In the American setting, cybernetics is simply the science and the scientific reasoning that governs the construction and use of computers. In this country, the term is not used in the more mystical sense that the Russians seem to imply.

But this is not to minimize the importance or complexity of cybernetics in the United States. As for complexity, we should remind ourselves at once, for example, that the important thing about a computer is what is put into it. Who programs the computer? It should be remembered that when a computer is programmed, one does not simply put all available data, all the vast information explosion of contemporary science, into the computer. The result would be simply chaotic. One must have a sophisticated selective principle in the back of his head, a yardstick which indicates what is vital, what is merely significant, and what is irrelevant. For the validity of what comes out of a computer depends entirely upon the validity of what goes into it. Among computer people, there is a stale pun that nevertheless makes this point most effectively. It is expressed in the formula GI = GO. GI stands for garbage in, and GO for garbage out; or, in other words, garbage in results in garbage out. There is a great reality here which must be kept in mind when evaluating the relevance of cybernetics to American life.

MILITARY TECHNOLOGY AND SOCIAL CHANGE

BY EDWARD L. KATZENBACH

Summary of Remarks

Dr. Edward L. Katzenbach is Vice President and General Manager of the Education Division, Raytheon Company.

The technology of war has always been closely related to the organization of society and its value system. But whether the nature of society has determined military organization, or military necessity our social values, is a moot question. Suffice to say that the relationship between the military and society was well recognized by historians of ancient times. But as war has become more important to society, as has certainly been true of the past century, historians have tended to ignore this relationship. In a sense, they have put war in a parenthesis in time with "causes" at one end and "results" at the other. As a result, not enough thought has been given to the relationship between military technology and social change. Perhaps some illustrations, through time, will indicate the nature of my view of the problem.

The castle was the first technologically sound defensive unit. Was medieval society organized around this technology? Or was it the organization of society which caused the castle to be built? The coming of gunpowder destroyed the castle as a viable military unit. Science and the study of ballistics and engineering then made the town the lowest common denominator as an element in defense. Moreover, gunpowder changed military virtues. Bravery, heroism, and the like remained as qualities of leadership; but brains, in the form of both engineering skills and organization, were added to the list of military necessities. What effect, then, did military technology have on the rise of a middle class, on new forms of government, new habits of thought?

Civil-military technology, a good road system, and later the railroad made the nation the viable unit of defense, and steam transport over the seas made it possible for wars to be much larger in geographic scope, and to be fought by broad alliance systems. Again, human organization learned to conform to the demands of military technology. And so did human value systems. Are not both nationalism and internationalism largely the by-product of changes in military technology?

Barbed wire and the machine gun brought stalemate to the Western Front in World War I. But the organization of industry and people behind the lines brought a whole new look to national organization. Governments became larger and man's view of government changed. So, finally, did his view of war. World War II, fought as it was in four dimensions—on and under the sea, on the surface of the earth and over it—again changed social values and, indeed, all of society. Almost for the first time, men, women, and children were considered legitimate targets for the new weapons of war.

I make these points because until this moment in time military technology has been a great moving force in society. But now technology has reached an impasse. It is manpower, with only limited technology, that is fighting the wars of today's world, in Korea, Cuba, and Vietnam. Time, therefore, has a new value in war that is closely related to human patience. In other words, it is the human will which today is of overriding importance in war. There is a paradox here. Technology no longer limits war. People do, and for the first time in history.

There is another paradox, however, which derives from the first one. It is that in a democracy, we have always believed that what we do best is to arrive at an agreed consensus. This we do, we believe, because of the freedom of information and opinion that characterizes our society. But there has never been more information available than on the issue of Vietnam, and yet on no war since the American Revolution has there been less consensus.

The first essential to a forward strategy is, therefore, to resurrect a sense of respect for the role of consensus in democracy. This is our most precious heritage. The new role of protest in our society can destroy it. In a time when man's will is in fact man's destiny, surely a respect for consensus is the first law of survival.

THE AMERICAN INSTITUTE FOR FREE LABOR DEVELOPMENT

BY WILLIAM C. DOHERTY, JR.

Summary of Remarks

Mr. William C. Doherty, Jr., is Administrator of the American Institute for Free Labor Development.

The labor movement in Latin America is one of the most important catalytic agents in that dynamic continent. But it is also one of the most vulnerable to totalitarian influences. The workers have new expectations and they are determined to fulfill them. They are seeking change and determined to get it. The primary question is, will they choose the chaos of violent revolution or the course of peaceful competition? The free, democratic labor movemnt in Latin America must be strengthened and expanded so that it can compete both with the established interests of society, and with the forces of totalitarianism which threaten to control and manipulate the power of labor.

The democratic labor unions of Latin America have three basic needs: to increase union participation in economic planning; to strengthen union resistance to totalitarian influences; and to bolster union independence from government, political parties, and from industry.

To help the labor sector attain these goals, the American Institute for Free Labor Development has been developed as a unique organization which reflects the pluralism of American society. Initiative for the foundation of AIFLD in 1962 came from the American labor movement, and today prominent labor leaders serve on the Board of Directors. Each year since 1962, the AFL-CIO has made a substantial contribution to help support AIFLD. In addition, more than 60 enlightened business firms make yearly contributions. And AIFLD's overall effort is increased far beyond what the private sector can support by means of United States government funds under the Alliance for Progress. Finally, many distinguished Latin American leaders serve on the Board of Directors, men such as Oscar Gale of Honduras, Gonzalez Navarro of Venezuela, and others.

AIFLD has two main fields of activities: trade union education; and social projects such as housing, workers' banks, *campesino* service centers, small "impact projects," and community services. These extend to every Latin American country and to the English-speaking Caribbean nations as well. The only countries outside the program are Cuba, Haiti, and Paraguay.

In AIFLD's educational programs, more than 50,000 trade unionists have participated in one or more levels of classes since June 1962. These programs begin with basic courses on trade unionism, and advance to intensive seminars on techniques of union organization and collective bargaining. Where possible, the best

students are brought to the most advanced level of training, the Front Royal School of Virginia, where they are given instruction in teaching methods, social project design and implementation, and leadership development. A new program in labor economics has recently been started in cooperation with a university consortium in New Orleans. There the students are given intensive training for an academic year in order to enable them to assist their unions to participate in national economic planning.

In its social projects work, AIFLD seeks to give those unions which have already been strengthened through training the means to fill the tangible needs of their members. One of the most critical needs is low cost housing and savings institutions to serve the worker. AIFLD has helped to build over 3,400 housing units in five countries, and has established the first workers' housing bank in Latin America, called ASINCOOP. Opened in 1964, the bank now has more than $1,256,000 in workers' savings. Feasibility studies have been completed for similar banks in other countries.

AIFLD feels that agricultural workers, small tenants, and sharecroppers are among the most neglected elements of Latin American society. These are the people to whom the Alliance for Progress is unfortunately mere rhetoric, not reality. For the vast majority, integral land reform, necessary for both the economic and political health of their countries, is still unheard of.

The AIFLD program for *campesinos* in Northeast Brazil is the most extensive of all our rural programs. It was set up in response to one of the most explosive situations in the hemisphere. In cooperation with the Federation of Rural Trade Unions, the Agency for International Development, a Catholic priest (Padre Crespo), and other agencies, AIFLD developed a plan for a series of *campesino* service centers. These centers would provide focal points for trade union activity, and also a measure of vocational and literacy education and medical services. Thus far, three service centers have been built and are in service in the state of Pernambuco. Classes in cooperatives, manual arts for men and women, home economics, and agricultural improvement have begun. These centers have become tangible evidence to the workers of the region of the concern of the North American labor movement for their plight. Even more importantly, they symbolize the possibilities for continued union growth in this area.

AIFLD is a unique organization that combines the talents and resources of the American labor movement with those of business and government, and then brings them to bear on one of the most critical problems of this hemisphere, namely, to assist the labor movement in Latin America to play a leadership role in social change, and to direct this dynamic process toward the goals of freedom and democracy.

AMERICA'S THIRD FORCE

BY RICHARD C. CORNUELLE

Summary of Remarks

Mr. Richard C. Cornuelle is Executive Vice President for Program Development, National Association of Manufacturers.

The expanding role of the federal government in almost every aspect of American life is a familiar but alarming phenomenon. While public uneasiness over the growing role of government is increasing rapidly, many American consider this development to be both inevitable and uncontrollable. It is, in short, something we must learn to live with.

I do not believe this is so. For many decades, this country managed successfully to contain big government. We did so because we had found another way to deal with many of our public problems. In his perceptive volume *Democracy in America,* Alexis de Tocqueville long ago commented approvingly on this country's governmental institutions, which afforded the citizen a maximum degree of political participation; and on American private enterprise, which gave the widest possible scope to private initiative. But the really unique aspect of American life was a third sector of society, neither governmental nor commercial, which he believed would enable the United States to accomplish, almost for the first time in human history, a society that was at once free, prosperous, and humane. This force was the propensity of Americans to work together in volunteer organizations for the accomplishment of public purposes. Today, de Tocqueville's third force has taken on enormous dimensions. Almost a million organized nonprofit activities now function in this country, and contributions toward them approximate $20 billion a year. Perhaps the largest element in this third force is the 320,000 churches of our country; but it also includes countless private foundations, fraternal and service organizations, funds, special crusades, and hospitals and nursing homes.

But the creative power of this tremendous third force now seems in danger despite its truly impressive size and its immensely rich complexity. Here, too, the role of government is rapidly increasing. At the present time, government operates and finances at least 90 percent of all organized welfare activities. By the year 2000, higher education, too, will be almost completely the responsibility of government. The evidence seems to suggest that we are losing confidence in the creative value of the American experience that de Tocqueville praised so highly. It seems obsolete, relevant only to a more simple period of our history. We have come to act as if only the government can deal today with such overwhelming contemporary problems as crime, urban life, and transportation.

But I would argue the opposite point of view. I would urge that private, nongovernmental organizations can deal with many of the problems confronting contemporary society more effectively than government ever will. The trouble is that

they have grown old-fashioned, even antiquated. Their techniques and methods are a generation old. They can never realize their enormous potential unless they drastically modernize their operating procedures.

Happily, I think we are beginning to see a renaissance in this respect. Let me cite some illuminating examples. Take, for instance, the relatively small but intractable problem of making loans to college students who do not meet conventional credit requirements. An independent organization, the United Student Aid Funds, has recently been organized to deal with this problem, and has been so successful that it operates today in all fifty states through 8,000 banks. Or again, there is a private group in Indianapolis that has taken bold initiatives to deal with the problem of urban redevelopment. Financed by loans from Indianapolis banks to meet the cost of land and materials, it employs the techniques of the prefabricated housing industry as one way of dealing with the problem. Groups of slum dwellers are organized into teams of 12, given training in building, and then put to constructing prefabricated houses in slum areas. The amazing thing is that it works. Finally, the National Association of Manufacturers has organized a highly successful program to cope with hard core unemployment, especially through the re-education of school dropouts and even incorrigible delinquents. The program has been so successful that NAM hopes to encourage its imitation all across the country.

These are only a few examples of private organizations turning their vast potential to the solution of contemporary social problems. And the potential is truly unlimited. If the enormous, and still largely untapped, reservoir of the American spirit for free cooperation in private undertakings of all kinds could only be set free, there is almost no limit to what could be accomplished.

Indeed, I would make a prophecy in this respect. The first third of the twentieth century was a period during which the commercial sector of American society took on its great strength and productive capacity. But the business community could not by itself accomplish the realization of the American dream. During the second third of the century, we resorted to government action for the solution of social problems, only to realize that this was no all-embracing panacea. I believe that the last third of our century may be marked by the renaissance of the third force in American life and its astounding capacity for problem solving through voluntary cooperation. Once this begins to happen, we may yet bring into being the humane society which de Tocqueville foresaw and which all Americans still aspire to.

APPENDIX

Editor's Note

Following are summaries of two lectures prepared for the National Strategy Seminars, 1967, which were co-sponsored by the National Strategy Information Center, Inc., at Town Hall, New York City, in winter and spring of this year. The subjects of these lectures seemed so relevant to the discussions at The First Interprofessional Forum on Priorities For Peace that the two synopses are included here as being of interest to participants in the Forum. Descriptive material concerning the Seminars was distributed to all participants at the Forum, and it was indicated that the Seminars would be, in effect, a continuation of the Forum itself.

VIETNAM: THE CONTINUING FIGHT FOR FREEDOM

BY FRANK N. TRAGER

Summary of Remarks

Dr. Frank N. Trager is Professor of International Affairs at New York University.

While Southeast Asian nationalist movements, in no small measure stimulated by indigenous cultural factors (such as Buddhism, Islam, and Confusianism), antedate World War I, they were also influenced by Western education, by variants of Marxist ideology and by the collapse of Western rule with the advent of the Japanese occupation of the region during World War II. Thus, anti-colonialism, nationalism and the desire for economic and technical modernization have been and are key factors in the area. However, the intensity of various nationalisms, the differences in historical background, and the diversity of ethnic, linguistic, and religio-cultural factors have until recently worked against greater regional unity.

Every one of Southeast Asia's states has been and is still today the victim and the target of Communist insurrections inspired and aided by Moscow, Peking, or both. Whether the Southeast Asian state has sought its security in neutralism or alliance, in socialism or capitalism, whether its government has tried to be friendly to all blocs or behaved with due caution in the United Nations, it has suffered since independence from Communist attempts at coups, revolts, insurrection, and always infiltration and subversion. Vietnam today is the most dramatic and tragic example of this protracted warfare.

In the mid-1920's there emerged in Vietnam two fundamental, partly underground revolutionary tendencies which under one Vietnamese name or another occasionally united but more often contested against each other for leadership against the French. These two tendencies are today symbolized by the Communist victors in the North (the Democratic Republic of Vietnam—DRVN) and the Nationalist victors in the South (the anti-Communist Republic of Vietnam).

The leader of the Communists, from the time their party was organized in Hong Kong in 1930 and admitted to the Comintern in 1931, has been Ho Chi Minh. During World War II, French Indochina remained under the control of

Vichy and made its "peace" with Japan. During this period Ho Chi Minh offered to supply "intelligence" and to harass the Japanese.

The United States, the Chinese Nationalists, and the allies generally accepted his offer and supplied his forces. It was this war experience which enabled Ho Chi Minh to seize the leadership of the anti-Vichy French, anti-Japanese forces, and to proclaim on September 2, 1945, the Democratic Republic of Vietnam.

By this time the Free French under de Gaulle were on their way back to "French Indochina." In the years 1945-46, Communists and Nationalists fought alongside of each other against the returning French. Only when the Nationalists in the North recognized the spuriousness of the Communist-led Vietminth "united front" did they then break with Ho and his Communist-controlled organization. But then it was too late. Eight years of warfare followed. The Communists against the French; the Nationalists against the French; and the French against both.

Toward the end of this disaster the Paris government, heading toward the 1954 Geneva Conference, signed or initialed treaties of independence with the kingdoms of Laos and Cambodia, and the State of Vietnam. But between March and September 1946—before the shooting began—France had already recognized the DRVN as a state "within the French Union." Obviously, therefore, there were now two states in the territory of Vietnam, with no fixed boundary between them; and both of them were present at the 1954 Geneva Conference.

That conference settled nothing, except the withdrawal of France from Vietnam. The Geneva Declaration, which called for elections "within two years" (Article 7), was signed by *no* country at Geneva. The United States issued its own declaration in support of the "statement" of the State of Vietnam and its willingness to accept the end of hostilities. The State of Vietnam in its statement opposed the terms of the Declaration and called *then* for free elections, supervised by an international body in a non-partitioned country.

But the country was partitioned by terms of the cease-fire signed by the French and the Communist North. France, the defeated power, forced to withdraw from North and South Vietnam, yet agreed to terms with Hanoi which, except for its own withdrawal, it would not be able to guarantee or fulfill. South Vietnam accepted the end of hostilities and to abide by the terms of the cease-fire *provided* there was to be in fact a genuine cease-fire between the Communist North and the Nationalist South.

This never occurred. Warfare began once again during the winter of 1954-55. Initiated by the Communists, it has continued ever since. It started below the military level of direct confrontation. It took shape as assassination and terror, with external assistance to the rebels and guerrilla-type action. It mounted as the major Communists powers, Russia and China, gave support and material aide to Hanoi; and Hanoi in turn has guided, directed, controlled, supplied, and led the war against Saigon.

In 1955 the United States decided to aid the Republic of Vietnam. Presidents Eisenhower, Kennedy, and Johnson continued this policy. The Congress each year

has passed appropriations in support of this policy. The Southeast Asia Treaty Organization, created by the Manila Conference of 1954, calls for and validates such support against Communist aggression, subversion, and infiltration.

The Gulf of Tonkin Resolution of August 1964 reaffirms this policy—and it was overwhelmingly re-endorsed a second time when a legitimate but ill-conceived effort was made by Senators Fulbright and Morse to withdraw our commitment. And since February 1965, the United States and South Vietnamese forces have mounted a campaign to stop the enemy on *his* soil. (For ten years he had enjoyed the unique luxury of striking but not being struck.) The 1966 Manila Conference, bringing together the seven allies in Vietnam who have forces there, supported this policy.

However much the Communist adversary has zigged and zagged in Peking and Moscow recently, he still presents—in one form or another—the major threat to the continuity of independence for any of the still free Southeast Asian states. There is no genuine detente with Moscow; there has been none for the past 49 years of its regime. Communist China, if anything, is more verbally belligerent, though so sorely beset by its own political contest for Communist Party power that it is less effective as a supporter of Hanoi.

To blunt this threat to the free Asian nations, we are waging undeclared war in Vietnam. United States post-World War II policy in Asia was reshaped in the heat of crisis following the Communist 1949 victory in China and the outbreak in June 1950 of the Korean War. In the latter, the United Nations determined that Communist China was an aggressor state. The system of bilateral and collective security and defense treaties begun in 1951 with Japan and culminating with SEATO in 1954, together with aid and related aggreements with every state in free Asia, and with United States military forces and bases under the United States Pacific Command, provide the framework of United States security policy in Asia in general, and toward the Republic of Vietnam in particular.

Since 1950 there has been little doubt that the United States has resolved to maintain a position of strength and interest in Asia. We sought to create and insure a defensive shield of anti-Communist power which would guard against further large-scale overt Communist aggression. The 1966 Manila Conference pointed up the fact that, in addition to the United States forces in Vietnam, our allies there are making increasingly important contributions: the Koreans with 40,000 troops; the Australians, 4,500; New Zealanders, 1,200; the Filipinos, 2,000; the Thais, uncounted but large scale support, including provision for the new B-52 bomber bases.

On October 23, 1964, former Prime Minister Sir Robert Menzies of Australia pointed out that the Phillipines, Thailand, Britain, Canada, Malaysia, India, Republic of Korea, Iran, Republic of China, Federal Republic of Germany, Japan, Israel, Tunisia, Turkey, and the Netherlands were giving aid of some kind to South Vietnam. Since then, some 13 additional nations, making 31 in all, have responded to the call for assistance from Saigon. Not all those giving aid have endorsed United States and allied policy in Vietnam, but none has withdrawn its aid since the shift in strategy and tactics which began in earnest on February 7, 1965. Interestingly,

these facts of *international* cooperation in and for Vietnam are rarely if ever noticed by the American press.

It is this mutuality of interest which provides the basis for at least two immediate and two long range propositions. The immediate ones are:

1. The risks of upward escalation against the Communist North are real but acceptable, provided the object is confined to the defense and security of the Republic of Vietnam,

2. South Vietnam must continue to receive military and other aid until it can restore political and economic stability and viability to its life as a small, responsible sovereign nation. Neither the "essentials" nor the "specifics" of Geneva 1954, nor the neutralization and coalition government policies applied to Laos in Geneva in 1962, offer positive guides to the future security of South Vietnam. Its land and sea borders must be made secure and guaranteed—this is the subject for a cease fire and negotiated treaty or other, ad hoc arrangement—while its friends and allies help a legitimate nationalist government establish and maintain domestic peace, stability and improvement of living conditions.

Successful outcomes to these two propositions will probably have an early and salutary effect on the policies of the states of Southeast Asia. Our friends in Asia will know that we are standing firm against the contemporary form of warfare at the lower end of the spectrum—today the hallmark of Communist aggression—the so-called "wars of national liberation" which are neither "national" nor liberating.

The long range propositions stemming from the active programs in Vietnam are:

1. They can nurture the growth of genuine Asian regionalism. With aid from the Free World, bilaterally and multilaterally, such regional cooperation can then sponsor a massive free Asian development program comparable to the Marshall Plan. The current Mekong Basin program, to whose support President Johnson pledged $1 billion when peace comes, is an example of what can and should be done.

2. The resultant security, improvement in the conditions of living and, hopefully, the encouragement and spread of representative institutions of government will be the best counter-defense to the enemy's strategy and tactics, including his "wars of national liberation." These will serve to deny him his target: the Himalayan rimlands, the Irrawaddy and Mekong valleys, and the mainland Southeast Asian rice bowl.

This represents the beginnings of a policy for Southeast Asia. It is in effect a determined two-pronged policy of containment, military and socio-economic, applied successfully in Europe and now, belatedly, in Southeast Asia, under the vigorous leadership of President Johnson. It is based on the unconditional recognition that the Communist adversary still presents—in the form or another—the major threat to the continuity of independence for any of the still free Southeast Asian states. Prudence, as well as self-interest—and, above all, belief in the value of the ever continuing fight for freedom—justify this policy.

STRATEGIC IMPLICATIONS OF SPACE ACTIVITIES

BY CHARLES S. SHELDON II

Summary of Remarks

Dr. Charles S. Sheldon II is Acting Chief of the Science Policy Research Division, Legislative Reference Service, Library of Congress.

The Space Age is an important new factor of national strategic concern, not just a side show which from time to time takes the headlines. Although space flight first burst upon the public scene with the flight of Sputnik in October 1957, its beginnings go back many centuries in the common heritage of all nations. For space flight is built upon almost all other scientific and technical knowledge: from an awareness of the sizes and distances of heavenly bodies; to the laws of motion, gravity, action and reaction; chemistry; materials and their manufacture; guidance, computation, and communications science.

The Soviet application of this knowledge brought a critical reexamination of the relative pace of technical progress in different parts of the world, the state of education, and assumptions about relative military strength. There was much confusion; and shifts of world opinion, even if inaccurate, were consequences to be considered in making strategic assessments.

Effects of Space

The United States space program takes about one percent of our gross national product, ten percent of our scientific and engineering talent, and is a third of all Government-funded research and development. Over a million jobs are provided, and such areas as southern California and the Gulf crescent are highly dependent upon this economic activity.

Subcontracts are spread all over the country, and hundreds of colleges are affected. NASA alone is funding graduate training to the extent of providing 1,000 new Ph.D.'s a year, without requiring these students to work for the agency, and thereby replenishing in numbers the complete amount of advanced degree holders taken by the program from the national stockpile.

The space program is not only replenishing our storehouse of basic scientific knowledge, but is rapidly being translated into practical applications which pay a direct dividend in a higher GNP for the nation. For example, only communications satellites offer us an easy prospect for meeting the swelling demand for over-ocean communications channels, and soon may be used as a more economical way to distribute TV programs even domestically. A five-day accurate forecast of the weather would bring estimated annual savings to the United States economy of over $5 billion. Satellites are an essential element to such accurate prediction, and may later play a role in even more significant weather modification.

Every month is disclosing new possibilities for natural resource discovery, mapping, and management from space. A recent study of all these potential applications suggests annual savings to our economy within fifteen years of $38 billion. The international savings could be even greater, although the policy questions of space applications may prove exceedingly complex when it comes to sharing costs, benefits, and controls.

Some studies suggest that the indirect spinoffs of space activity, in terms of the growth of our technical and industrial capabilities, will be even more important to us than the direct applications. But few existing statistical series are now capable of measuring these changes in a cause-and-effect sense. Typical of such new spinoffs is the attention being paid to aerospace industry systems techniques for solving a host of earthbound problems such as pollution, crime, data management, and transportation.

Space technology is already an important direct military factor, not in the aggressive sense, but in its provision of a host of supporting services linked to communications, weather reporting, navigation, and early warning. For the future, inspection systems using space methods, whether national or international, may be further forces for stabilization of the world military situation, to the advantage of both ourselves and other powers.

International Competition

Although our space program is important to us on its own merits, we cannot help but be aware that the Soviet Union also has a large program, surprisingly similar to ours in scope and size. Through February 28, 1967, we had orbited or sent to the Moon and planets 471 payloads. The Soviet Union had done the same with 224. However, the Soviet Union has held a definite lead in weight of payload, just as we hold the lead in number of spacecraft. Both countries have had space failures, too, although now the success rate is better than 90 percent. There is not much difference between the two countries in this respect, as they use the same world technology.

Two thirds of American launches are for the Department of Defense; but this obscures the dominant role of NASA, the civilian agency, in our total space effort. Our program is dedicated by law and by action to peaceful ends, including preservation of the peace. The Soviet program also claims to be entirely peaceful, but they less readily admit the obvious fact of a heavy military flavor to what they do. A better appreciation of the two major programs is provided by a review of their major elements.

The Russians got off to an early start in flying scientific missions. These have ranged from spectaculars like the orbiting geophysical laboratory in 1958 and the more recent Proton shots carrying 27,000 pounds of cosmic ray experiment payload, to 32 Kosmos-class payloads which receive a minimum of publicity and are equivalent to the 33 NASA Explorers. The Russians have not neglected science, and they

publish many findings; but probably they do not do quite as well as NASA across the whole spectrum of such interest.

Both countries have similar sized programs for unmanned exploration of the Moon, and both have had many failures. Our first 13 lunar attempts did not succeed, but since then we have had brilliant successes with Ranger, Surveyor, and Lunar Orbiter. The Soviet Union failure record is not all in the public domain. But after their success in taking pictures of the far side of the Moon in 1959, there were nothing but failures until Luna 9 soft-landed in 1966; and since then four other shots have also been successes. A measure of the difficulty of comparison is the following. We announced that Surveyor would land on the Moon in 1963. It did not fly until 1966, when its first attempt was a stunning success, returning 11,500 pictures. The Russians started soft landing attempts in 1963, but every one failed until 1966, when they beat us to a soft landing. Their ship returned only 27 pictures, and we are left with a debate as to whether essentially these few panoramic views did the same job as our thousands, in terms of the most fundamental questions of judging the nature of the surface.

The Soviet unmanned interplanetary effort has been far greater. They made attempts to Mars and Venus at every "window" launch opportunity from 1960 to 1966, and even their 1960 payload weight will not be surpassed by this country before 1973. But not a single one of the 17 flights returned any planetary data. We made only four launch attempts, and a Mariner returned data from Venus and another Mariner pictures and data from Mars. These were astounding successes, but detractors are not sure what new facts they proved. So how does one strike a balance between the two countries in this field? Probably only in an arbitrary way.

The United States has had a clear lead in weather reporting, communications, and navigation from space. Now the Soviet Union has altered its priorities and has programs in all three fields, but still is not up to our level of performance, particularly with respect to electronic reliability. Each of their programs does have some special advantages over ours, while being weaker in other respects.

The United States rarely comments officially any more on its military support flights, although the satellites concerned are hardly different from civilian ones except in terms of the customer using the data. The Soviet Union does not admit to any military flights. But 65 heavy Kosmos satellites in the better-than-10,000-pound class fly low circular orbits from which they are usually recalled after eight days. It is hard to find any plausible mission other than observation, and this suspicion is confirmed by private remarks made by former Premier Khrushchev to a few Westerners. One can argue that a greater awareness of what is going on is a step toward stability, and will discourage rash actions which might lead to war. Surprises and miscalculations are harder. Further, we may be pointing toward a day of open skies, since we now have many years of acceptance of overflight in space which can hardly be confused with the legal problems surrounding air flight.

The real worry of people about the military use of space is the question of

orbiting weapons of mass destruction. The major powers have pledged not to do so, and such agreement was easy to reach mostly because majority opinion today discounts the significance of such systems. Nuclear weapons in silos or in submarines are far easier to maintain and control, and can be pointed to more targets than weapons in orbit. If a few weapons were put up for blackmail, they might invite a pre-emptive strike by ICBM's against the offending country. If a few were put up in secrecy, they would neither have the blackmail use nor be decisive in countering the total deterrent strength of a major power. If large numbers were planned for secret deployment, there are several ways in which their presence would quickly be deduced by modern technology. And again, since they probably could not reach all the counter forces, they would risk the destruction of the launching country, quite aside from the difficulties of guaranteeing reliable performance. This assessment may not remain true for all time, and consequently military authorities have a responsibility for continuing to study the problem and to have contingency counter plans.

So far I have not compared manned space flight and speculated on future plans. The Russians held a strong early lead which was completely overcome by our successful Gemini program, with its use of fuel cells for long stay times, its use of maneuver, rendezvous, docking, and added propulsion to high orbit. But we must be careful to avoid overconfidence; the two year Soviet pause is probably just a time of preparation for far more ambitious missions. Through most of the time, the Soviet Union has held a strong lead in the lifting power of its operational launch vehicles. We are close to having man-rated the Saturn IB, which can put about 40,000 pounds in low orbit. But now the Russians have a new launch vehicle whose first stage thrust is close to double that of Saturn I. When it gets upper stages it would be capable of supporting manned orbital laboratory operations, manned circumlunar flight without assembly in orbit, or unmanned planetary landers of some complexity.

We have a still larger Saturn V coming which is the basis of our lunar landing program and other advanced missions. Newspaper speculation is that the Russians have something even larger, but there is no way to assess these stories from open sources. If the Russians are to beat us to the Moon, as they sometimes have claimed, we must soon see a resumption of their manned flight activity. This is because they are as conservative as we in trying to check out equipment before committing men.

Since there have been repeated stories of Soviet cosmonauts killed in orbit, it is necessary to repeat that neither country has suffered such losses in actual flight, and we do not know either way how the Russians have fared on the pad. This assertion is supportable both in terms of official United States testimony and in terms of simple logic. Every announced flight has succeeded, and been advertised while in progress. Every so-called failure has been part of a supposedly secret program which is never detected by official tracking stations, but which is "followed" by amateur radio listeners.

Future Prospects

Parametric studies show that even without new scientific discoveries, better engineering will bring the costs of space flight down by orders of magnitude in the years ahead. The Soviet Union for many years has pledged itself at all levels of its government to explore the whole solar system with men. They and ourselves are capable of doing this. As costs fall, it will be within the reach of other countries as well. As our command of power increases, we can confidently expect to see the Moon and perhaps at least Mars and Venus made into habitable, interesting, and economically useful places for mankind.

In a sense, we are at the threshold of a new civilization. What are the chances that only Earth has intelligent life? We are one tiny planet among many billions of galaxies made up of many billions of stars. Probably only the distances and our insignificance have shielded us from possible contacts with life from far away. Not knowing where ultimate destiny will carry us, there are still finite goals within the solar system which may determine whether America continues to hold a position of leadership among men or whether it slips into one of the backwaters of history. A broad strategic concept of our nation and its position in human affairs requires an awareness of the costs, problems, and potential rewards of space flight.

NATIONAL STRATEGY INFORMATION CENTER, INC.
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THE FIRST INTERPROFESSIONAL FORUM ON PRIORITIES FOR PEACE

THE PLAZA
NEW YORK CITY
DECEMBER 6, 1966

Approved For Release 2004/10/13 : CIA-RDP88-01315R000300710006-8

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Why This Forum?

December 6th is the 25th anniversary of Pearl Harbor Eve — that moment when America slept, indifferent to the strategies of foreign dictators, taking false comfort from the assumed security of her great ocean moats, unaware that the carriers of Imperial Japan were readying a first strike, and ignorant also of the ideology and global war plans of Nazi Germany.

In the nuclear age, it is imperative that Americans never again misread the intentions, or underestimate the capabilities, of totalitarian Party elites. It is vital that civilian opinion-leaders understand the complex formulae of national defense and international security affairs which include factors of technology, diplomacy, economics and national will.

Overall Purpose

The purpose of this Forum is not to look backward towards December of 1941, but to focus on the requirements of a sophisticated "forward strategy for freedom" that will enable the U.S., in the next 10-15 years, to (a) keep aggression at bay, whether through insurgency or space-warfare, and (b) help less fortunate nations build the institutions required for genuine peace and human betterment. We seek educational substitutes for Pearl Harbor and search for new organizational skills by which the private citizen can more effectively answer the question: "What can I do for my country?"

Cardinal Issues

- HOW REAL THE DETENTE?
- NATO AND THE CHANGING BALANCE OF POWER
- GEOPOLITICS IN THE CONTEXT OF TECHNOLOGICAL SURPRISE
- CHINA'S STRATEGY OF TERROR
- IS THERE AN ANTI-BALLISTIC MISSILE GAP?
- THE CHALLENGE OF SOVIET CYBERNETICS
- THE PRIVATE SECTOR AND PREVENTIVE INSURGENCY

December 6th, 1966
9:00 A.M.-5:00 P.M.
Grand Ballroom, The Plaza
5th Avenue at 59th St., New York City

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Morning Session

9:00—11:45

NATIONAL ANTHEM

Opening Remarks: **FRANK R. BARNETT**
President, National Strategy Information Center, Inc.

Chairman: **MAJOR GENERAL ALFRED G. TUCKERMAN, USAR (Ret.)**
Administrative Partner, William E. Hill & Co., and
Former Commanding General, 77th Infantry Division

Speaker: **ADMIRAL ARLEIGH A. BURKE, USN (Ret.)**
Director, The Center for Strategic Studies, Georgetown University

"MILITARY AND TECHNOLOGICAL SURPRISE: THE LESSON OF PEARL HARBOR"

Introduced by: **Morris I. Leibman**
Chairman, American Bar Association Standing Committee on Education About Communism and Its Contrast With Liberty Under Law

Speaker: **GENERAL ALFRED M. GRUENTHER, USA (Ret.)**
Former Supreme Allied Commander in Europe

"IS NATO OBSOLETE?"

Introduced by: **Dr. Bernard E. Donovan**
Superintendent of Schools, New York City

Speaker: **AMBASSADOR THEODORE C. ACHILLES**
Vice Chairman, Executive Committee, The Atlantic Council of the United States, Inc.

"THE FUTURE OF THE ATLANTIC ALLIANCE"

Introduced by: **Dr. Richard H. Heindel**
President, Pratt Institute

Speaker: **DR. RALPH L. POWELL**
Professor of Far Eastern Studies, The American University

"RED CHINESE MILITARY CAPABILITY AND THE STABILITY OF ASIA"

Introduced by: **Herman W. Leitzow**
President, Sales Executive Club of New York

Speaker: **DR. HENRY A. KISSINGER**
Professor of Government, Harvard University

"PRIORITIES FOR U.S. POLICY IN EUROPE"

Introduced by: **William J. Casey**
Chairman, Exec. Committee, International Rescue Committee

PANEL DISCUSSION OF MORNING SPEAKERS

Moderator: **AMBASSADOR ACHILLES**

RECEPTION — 11:45 LUNCHEON — 12:20

Afternoon Session

1:15—5:00

Chairman: **MAJOR GENERAL A. C. O'HARA, NYANG**
Chief of Staff to the Governor of New York

Panel Discussion: **"THE CHALLENGE OF SOVIET CYBERNETICS"**

Introduced by: **Gene E. Bradley**
Manager, International Government Relations
General Electric Company

Moderator: **Dr. Frank Fremont-Smith**
Director, Interdisciplinary Communications Program
The New York Academy of Sciences

Panelists: **Colonel Raymond S. Sleeper, USAF**
Commander, Foreign Technology Division
Wright-Patterson Air Force Base

Dr. John J. Ford
Professor of Cybernetics, The American University

Panel Discussion: **"FORWARD STRATEGY: ESSENTIALS FOR SECURITY AND FREEDOM"**

Introduced by: **Clifford B. O'Hara**
Past President, New York Chapter, National Defense Transportation Association

Moderator: **Honorable Edward L. Katzenbach**
Vice President and General Manager, Education Division
Raytheon Company

Panelists: **William C. Doherty, Jr.**
Administrator, American Institute for Free Labor Development

Richard C. Cornuelle
Exec. Vice President, National Association of Manufacturers

Panel Discussion: **"SEARCH FOR ANSWERS"**

Introduced by: **George Field**
Executive Director, Freedom House

Moderator: **Dr. Harry D. Gideonse**
Chancellor, New School for Social Research

Panelists: **Dr. Richard B. Foster**
Director, Strategic Studies Center, Stanford Research Institute

Howard S. Turner
President, Turner Construction Company

Closing Remarks: **Frank R. Barnett**
"Conclusion and Next Steps"

ADJOURNMENT

What is NSIC?

The National Strategy Information Center (NSIC), organized in 1962, assists professional societies, associations and the general public to study the relation of military power, geopolitics and communications theory to national goals. It has organized forums on comparative ideology, economic warfare, and propaganda analysis for such groups as the Young Presidents Organization, the Steel Service Center Institute and the U.S. Chamber of Commerce. For four years, it has worked with a Standing Committee of the American Bar Association to support some 20 university summer institutes for high school teachers on "Democracy vs. Communism."

NSIC's first major book, a symposium of twenty-six authorities, is entitled PEACE AND WAR IN THE MODERN AGE; Frank R. Barnett, William C. Mott and John C. Neff (editors); Doubleday; 1965. Contributors include Dean Acheson, Arleigh Burke, Allen Dulles, Dwight Eisenhower, Dean Rusk and scholars who lecture to the War Colleges and write for the military and foreign policy quarterlies.

In 1964, the Center distributed to high school debate teams in 30 states 7,000 gift copies of an analysis of the semantics and security implications of "peaceful coexistence" as used in Communist journals and Party memoranda. The 126-page abstract and commentary was prepared for the American Bar Association by scholars at The Center for Strategic Studies at Georgetown University. In 1965, NSIC distributed 5,000 copies of a panel discussion on "Detente and the National Security" conducted before the joint student body of The Industrial College of the Armed Forces and The National War College, and published in THE GENERAL ELECTRIC FORUM. Other contributors to this issue of the journal included foreign correspondent Roscoe Drummond, Under Secretary of State George W. Ball and General Earle G. Wheeler, Chairman, U.S. Joint Chiefs of Staff.

Since 1962 the New York Committee, National Strategy Seminars has called upon NSIC to suggest topics and provide speakers for its annual series of 12 lectures. These seminars, held each year since 1958 at Town Hall in New York City, are organized by New York alumni of field courses conducted by The Industrial College of the Armed Forces, under the chairmanship of Frank A. Vanderlip, Jr. Because of the high quality and intrinsic educational value of this program, the Department of Defense has officially sponsored and certified it for reserve point credit for all services.

Currently, NSIC is organizing national security briefings for mass media personnel co-sponsored by universities.

NSIC is supported by grants and gifts from foundations, corporations, individuals and associations. All grants are tax-deductible to the donor.

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Conference Participants

ACHILLES, Theodore Carter is Vice Chairman of the Executive Committee, The Atlantic Council of the United States, Inc. Ambassador Achilles joined the Foreign Service in 1931 and served in a number of the world's major capitals. From 1947 to 1950 he was at the Department of State, occupied primarily with negotiation of the North Atlantic Treaty. In 1950 he was assigned to London as Deputy Permanent Representative on the NATO Council, to Paris as Minister in 1952, to Peru as Ambassador in 1956, and subsequently to Washington as Counselor of the Department of State. After his retirement in 1962, Ambassador Achilles joined The Atlantic Council, an educational organization devoted to the development of Atlantic unity.

ARDLEIGH, Joseph D. is President of The Research Institute of America, Inc., the world's largest industry-supported business advisory organization. After early experience with the Hoover Company of North Canton, Ohio, and with his own business, Sales Methods Incorporated, he first joined The Research Institute of America in 1939 as Membership Director. Appointed Executive Vice President in 1951, he was recently elected President and Chief Executive Officer of the corporation. Mr. Ardleigh is recognized nationally as an authority in the fields of modern sales and personnel practices.

BARNETT, Frank R. is President of the National Strategy Information Center, Inc. A former Rhodes scholar, college professor, and military government official in Berlin, he is a lecturer, writer and co-editor of **Peace and War in the Modern Age** (Doubleday), a sypmosium on problems of national defense. From 1955 to 1962, Mr. Barnett was Vice President and Director of Research of The Richardson Foundation, Inc. In 1958-9, he helped to initiate the Defense Strategy Seminar for reserve officers at The National War College and has served on the faculty of that summer session since then. He is also the consulting program manager of a Committee of the American Bar Association which publishes analyses of Communist tactics, strategy and objectives and encourages teacher training in the contrasts between totalitarianism and liberty-under-law.

BELKIN, Samuel is President of Yeshiva University. After taking his Ph.D. at Brown University in 1935, Dr. Belkin joined the staff of Yeshiva as Instructor in Greek. He rose swiftly through academic ranks and was named Dean of the school's Rabbi Isaac Elchanan Theological Seminary in 1940, and President of Yeshiva in 1943. Under Dr. Belkin's leadership, Yeshiva has carried out a broad academic and physical expansion program, has become a university, and has established a liberal arts college for women and several graduate schools in various disciplines. Yeshiva is today America's oldest and largest university under Jewish auspices.

BOWKER, Albert Hosmer is Chancellor of The City University of New York. He began his professional career at MIT in 1941. After wartime service with the government, Dr. Bowker joined the staff of Stanford University in 1947, and was appointed Director of Applied Mathematics and Statistics Laboratories in 1951, Professor of Mathematics and Statistics in 1953, and Dean of the University's Graduate Division in 1958. Dr. Bowker assumed his present post in 1963. One of this country's leading mathematicians, he has published numerous books and papers on mathematical statistics.

BURKE, Admiral Arleigh A., USN (Retired), is Director of The Center for Strategic Studies, Georgetown University. He was graduated from Annapolis in 1923, and served with great distinction in a variety of posts during his forty-two year naval career. Admiral Burke was an outstanding combat commander during World War II and the Korean War. For several months he was assigned as a member of the United Nations Truce Delegation to negotiate with the Communists for a military armistice in Korea. He was named Chief of Naval Operations in 1955 and served in this post until his retirement in 1961.

CORNUELLE, Richard C. is Executive Vice President for Program Development, National Association of Manufacturers. Prior to joining NAM in 1966, he served with a number of foundations, most recently with the Foundation for Voluntary Welfare, which he established to develop, test, and launch new public service programs by non-governmental agencies. Before this, he was associated with Princeton Panel, Inc., the William Volker Fund, the Small Business Economic Foundation, and the National Industrial Conference Board. Mr. Cornuelle was also founding director of United Student Aid Funds, Inc. He is author of **Reclaiming the American Dream.**

DOHERTY, William C., Jr. is Administrator of the American Institute for Free Labor Development. He has devoted his career to the labor union movement, and has had especially rich experience in Latin America. Mr. Doherty has held important posts with the International Confederation of Free Trade Unions and with the Postal, Telegraph and Telephone International. He joined the American Institute for Free Labor Development in 1962, and is now in charge of its program of trade union education and labor social projects.

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DONOVAN, Bernard E. is Superintendent of Schools of the City of New York. He has served in the New York City school system since 1930, first as a teacher, then as an administrator in successively more responsible positions. He was appointed to his present post in 1965. Dr. Donovan is a Commander in the Naval Reserve, and has taken a leading part in a wide variety of civic activities.

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FORD, John J. is Professor of Cybernetics at The American University. Dr. Ford is also Executive Director of the American Society for Cybernetics.

FOSTER, Richard B. is Director of the Strategic Studies Center at the Stanford Research Institute. The Center is engaged in analyzing and evaluating United States military policies, strategies, and programs. Before joining the Stanford Research Institute in 1953, Mr. Foster was associated with Marquardt Aircraft, and was also a partner in the management consulting firm of Foster and Derian. He has served in various government agencies, and was recently director of the strategic, economic, and cost studies of the Department of Army Nike-X Threat Analysis Study.

FREMONT-SMITH, Frank, M.D., is Director of the Interdisciplinary Communications Program of the New York Academy of Sciences. A graduate of Harvard Medical School, his early career was devoted to research and teaching there and at nearby hospitals. In 1936 Dr. Fremont-Smith joined the Josiah Macy, Jr. Foundation as its Medical Director. In this post, which he held until 1960, Dr. Fremont-Smith did outstanding work on the theory of interpersonal communication techniques. After retirement, he served four years as Director of the Interdisciplinary Conference Program of the American Institute of Biological Sciences prior to accepting his present post.

GIDEONSE, Harry D., Chancellor of the New School for Social Research, is one of this country's most distinguished educators. After a teaching career at Columbia, Rutgers, Chicago, and elsewhere, Dr. Gideonse was named President of Brooklyn College of The City University of New York in 1939. He retired from Brooklyn in 1966, and has recently become Chancellor of the New School. He has written and lectured widely on various problems and public policy.

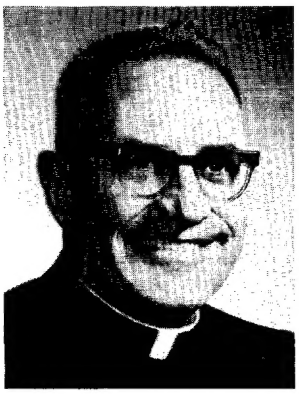
GRUENTHER, General Alfred M., USA (Retired), was graduated from West Point in 1918. After a variety of peacetime assignments during the interwar years, he achieved an outstanding record in World War II, notably as General Eisenhower's Deputy Chief of Staff in London, and later as General Clark's Chief of Staff in Africa and Italy. In the postwar years, he has served as Deputy Chief of Staff for Plans, Department of Army; Chief of Staff at SHAPE, Paris; and, during the years 1953-1956, as Supreme Allied Commander, Europe. After his retirement, he became President of the American Red Cross, 1957-1964.

HEINDEL, Richard Heathcote is President of Pratt Institute. During a long and distinguished career, Dr. Heindel has held important educational posts with a number of colleges and universities, foundations, and government agencies. From 1950 to 1954, he was Deputy Director, Staff, United States National Commission for UNESCO, Department of State. In 1954 he became Dean of the College of Arts and Sciences at the University of Buffalo, and Vice Chancellor of the university two years later. He was named President of Wagner College in 1958, and appointed President of Pratt Institute in 1961.

HOXIE, R. Gordon is Chancellor of Long Island University and President of C. W. Post College of Long Island University. A teacher of American history, geopolitics, and political science, Dr. Hoxie has taught or lectured at a number of colleges and universities. As a reserve Air Force Colonel, he has attended the Defense Strategy Seminar of The National War College. In 1954 he became Dean of the College of Liberal Arts and Sciences at Long Island University. He was appointed Dean of C. W. Post College in 1955 and Provost in 1960. Two years later he was named Vice President of the university as well. He became President of C. W. Post College in 1962, and concurrently Chancellor of Long Island University in 1964.

KATZENBACH, Edward L. is Vice President and General Manager of the Education Division of Raytheon Company. Before joining Raytheon this year, Dr. Katzenbach was associated with the American Council on Education, where he directed studies on college and university budgeting, and on the educational needs of business and industry. For the preceding three and a half years, he was Deputy Assistant Secretary of Defense for Education. From 1955 to 1959 he served as Associate Director and then as Director of the Defense Studies Program at Harvard University. Dr. Katzenbach served during World War II and the Korean War, and is a Colonel in the Marine Corps Reserve.

KISSINGER, Henry A. is Professor of Government at Harvard University and a staff member of its Center for International Affairs. One of this country's most thoughtful and prolific commentators on foreign policy, his books include **Nuclear Weapons and Foreign Policy** and **The Troubled Partnership: A Reappraisal of the Atlantic Alliance.** He is a frequent contributor to "Foreign Affairs." Dr. Kissinger has served frequently as a consultant to various government agencies, including the Department of State, the Arms Control and Disarmament Agency, and the National Security Council. He is Director of the Defense Studies Program at Harvard.



McLAUGHLIN, Rev. Leo, S. J., is President of Fordham University. Ordained a priest in 1945, he has had a distinguished career in Catholic higher education. In 1950 he was assigned to Fordham University as Director of Station WFUV-FM. Three years later he was named Dean of Fordham College, and in 1959 he became Dean of Saint Peter's College in Jersey City. He was made President of Saint Peter's in May 1965, and moved to his present post several months later.

O'HARA, Major General A. C., NYANG, is Chief of Staff to the Governor and Commanding General of the New York Army National Guard, which posts he has held since 1959. General O'Hara was an outstanding company and battalion commander in the Pacific Theatre in World War II, where he planned and led the first night attack of U.S. forces on Okinawa. After the war he served in staff and command positions in the 27th Infantry Division, becoming Commanding General in 1957. As Chief of Staff to the Governor he directs the activities of 35,000 troops of the State Military Forces.

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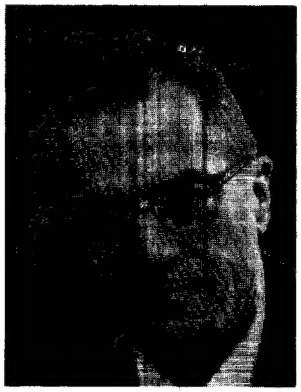
POWELL, Ralph L. is Professor of Far Eastern Studies at the School of International Service, The American University. He has also taught at Princeton University and The National War College; and was Counselor for Public Affairs and Director of USIS at the United States Embassy in Taipei, 1956-1958. Dr. Powell is author of **The Rise of Chinese Military Power 1895-1912** and **Politico-Military Relationships in Communist China.** He is also a consultant to the Department of State.

SLEEPER, Colonel Raymond S., USAF, has command of the Foreign Technology Division of the Air Force Systems Command. A 1940 graduate of West Point, he has also studied at Harvard University and the Air War College. He served in the Pacific Theater during World War II, and subsequently held a variety of command and staff posts of increasing responsibility. In 1955 he was named Commander of the 7th Bomb Wing, H (B-36), and two years later was assigned to CINCPAC as Chief of War Plans. He was first posted to the Air Force Systems Command in 1960, and assumed his present command this year.

TUCKERMAN, Major General Alfred Girard, USAR (Retired) is Administrative Partner in the management consulting firm of William E. Hill & Company, Inc., with which he has been associated since 1954. Prior to joining this firm, Gen. Tuckerman had extensive experience in the import-export business and in commercial banking. In addition to active duty throughout World War II in the Pacific Theater, General Tuckerman served in the National Guard and Reserve for twenty-nine years. He retired in October 1957 as Commanding General of the 77th Infantry Division.



TURNER, Howard Sinclair is President of Turner Construction Company, one of the world's largest engineering firms. His business career began with E. I. duPont de Nemours & Co., and he has also served with Pittsburgh Consolidation Coal Co., and Jones & Laughlin Steel Corporation. Dr. Turner has frequently served various government agencies as an advisor on technical and research problems. He became President of Turner Construction Company in 1965.

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